PROCUREMENT ORIENTATION

FOR

SCIENTIFIC AND TECHNICAL PERSONNEL

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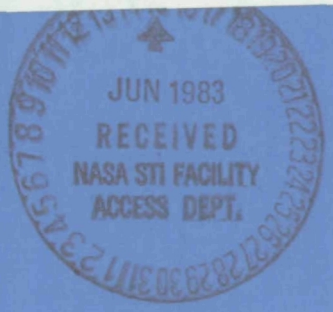

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SCIENTIFIC AND TECHNICAL PERSONNEL

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PROCUREMENT ORIENTATION FOR SCIENTIFIC & TECHNICAL PERSONNEL

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PROCUREMENT ORIENTATION COURSE

Course Schedule

Hours	Subjects
FIRST DAY	
0830-1000	Course introduction. Overview of the procurement cycle. Application of basic laws and regulations. Structure of the procurement and contracting system. Procurement and contracting defined. Differences between formal advertising and negotiation.
1015-1130	Two-step formal advertising. Small purchases. Procurement by negotiation. Exceptions to the law which permit negotiation.
1230-1400	Types of contracts
1415-1500	Types of contracts
1500-1600	Case discussions

Hours	Subjects
SECOND DAY	
0830-1000	Initiation of procurement. Statement of work. Developing the SOW. Work Breakdown Structure. Solicitation of proposals. Evaluation of proposals not involving SEB. Competitive range and conduct of negotiations.
1015-1130	Source evaluation and source selection using SEB. Initial functions. Weights and scoring. Essentials of the evaluation process. Cost and pricing data. Final scoring and SEB report.
1230-1400	Quality assurance, inspection, and acceptance.
1415-1500	Mistakes in bids, protests, disputes, and claims.
1500-1600	Case discussions

Hours	Subjects
THIRD DAY	
0830-1000	Contract administration. Elements of contract administration. Modification and changes. Negotiation of changes and equitable adjustments.
1015-1130	Contract cost management. Corporate accounting systems. Cost overruns and underruns. Contractor financial management reports.
1230-1400	Termination of contracts. Termination for default. Reasons for termination. Procedure for default action. Appeal rights of the contractor. Termination for convenience. Settlement procedures. Final payment and closeout.
1415-1500	Contracting with small business. Set-aside program. Labor surplus areas. Certificate of competency. Standards of conduct.
1500-1600	Case discussions

CHAPTER I

COURSE INTRODUCTION

Procurement Orientation for Scientific and Technical Personnel is a three day course specifically designed to orient scientific and technical personnel in the procurement process. The course provides an introduction to the basic principles, regulations, and procedures of contracts and contracting for research and development efforts. The application of the NASA Procurement Regulations is discussed, as well as their implementation by other procurement directives.

The importance of the "procurement team" and its functions are highlighted, as well as its impact on the interface between Government and industry. The student is introduced to the "procurement cycle" and is given a panoramic view of the procurement process with emphasis placed on the role of the scientist, engineer and other technical personnel and that of the contracting officer. Methods of acquisition, as well as types of contracts available for use and the purposes for which they are normally employed, are reviewed to provide the student with an overview of the advantages of each.

Procurement by formal advertising and two-step formal advertising are traced from their applications through to award of a contract. Procurement by negotiation is reviewed from a discussion of the exceptions to the law permitting negotiation, development of Determinations and Findings, Requests for Proposals, proposal evaluation, negotiation techniques, and contract award.

Postaward administration of contracts is stressed, with emphasis on the roles of the contracting officer vis-a-vis scientific and technical personnel; the need to monitor contractors, obtain reports, and review subcontracts; and methods of processing contract changes. The paramount objective is to assure that NASA will get what is required under the contract and what it is paying the contractor for.

Government-furnished property, comparison of negotiation and formal advertising, termination of contracts for convenience and default, contract clauses, mistakes in bids, bid protests, disputes, and claims are also reviewed and discussed.

This three day course consists of both platform instruction and discussion of case studies by members of the class. Student participation in all discussions is encouraged throughout the course.

CHAPTER 2

THE PROCUREMENT CYCLE

NASA employs two principal methods of procurement, formal advertising and negotiation. These principal methods are distinguished by the manner in which the contract is awarded. Formal advertising contemplates broad solicitation and extensive competition, with rigid policies and procedures. Negotiation, on the other hand, does not involve a rigid set of formalized procedural steps and may be defined to include all legal methods of procurement other than formal advertising. Care should be taken, however, not to equate competition solely with formal advertising, since negotiation is also required to be competitive to the extent practical.

The chart entitled "The Procurement Cycle" on page 21-1 highlights distinguishing characteristics of advertising and negotiation as well as indicating major steps in the procurement cycle from presolicitation through award and completion stages. The purpose is to provide a sense of relationship in the application of NASA procurement policies and practices.

CHAPTER 3

APPLICATION OF BASIC LAWS AND REGULATIONS

The basic body of law governing Government procurement is the Constitution, and the National Aeronautics and Space Act of 1958, as amended (Public Law 85-568) Chapter 137, Title 10, of the United States Code, popularly known as the "Procurement Act."

The Congress has enacted numerous statutes applicable to appropriations. Like other Departments and Agencies, NASA proceeds through the process of the budget cycle. Each year the Administrator of NASA develops requirements based on approved programs and the implementation of the approved programs by the various Centers. These dollar requirements are presented to the Office of Management and Budget. Hearings are held and subsequently fund requirements are included in the budget submitted by the President to Congress. After passage of the appropriation bill, NASA Headquarters makes a request for apportionment of funds to the OMB. NASA Headquarters then passes funds down to the Centers. Funds are then certified as available by the Financial Management Division to the Procurement Division for use on a specific procurement. The "certification" of funds may not necessarily mean that the funds are immediately available for the particular purchase, but rather that there is the likelyhood that funds will be made available at the time the contract is ready for signature. Caution must be taken to avoid over-programming.

To carry out the provisions of the Procurement Act and to establish policies for procurement areas not covered by the Act, NASA has issued

the NASA Procurement Regulation. These regulations are similar to the Defense Acquisition Regulation which is applicable to the Department of Defense activities, and the Federal Procurement Regulations which govern procurement in the Government civilian agencies.

An important and very basic statutory limitation on the contracting officer's authority is found in what is generally referred to as the Antideficiency Act (31 U.S.C. 665(a)). It provides that expenditures or contract obligations in excess of funds appropriated are prohibited. This Act does not prohibit a conditional contract, where the Government's liability is contingent on future availability of appropriations. While it is stressed that the contracting officer is authorized to expend funds, a contracting officer who enters into a firm contractual obligation without the funds to cover it is really in trouble in the absence of specific statutory authority. Other statutes pertaining to limitations on expenditure of funds include:

1. 41 U.S.C. 11 -- No contract or purchase on behalf of the United States shall be made unless the same is authorized by law or is under an appropriation adequate to its fulfillment.
2. 41 U.S.C. 12 -- No contract for public improvement shall exceed appropriations for that specific purpose.
3. 31 U.S.C. 627 -- No Act of Congress shall be construed as an appropriation or authorization for entering into a contract unless so declared in specific terms.

CHAPTER 4

STRUCTURE OF THE PROCUREMENT AND THE CONTRACTING SYSTEM

Establishing the Need

The procurement process starts with a "requirement." A requirement may be dfined as a determination that a need exists which must be satisfied. The need may be real or apparent, existing or potential, externally or self-generated or in response to direction from a higher authority. This is true whether talking about complex space systems or commercial items.

NASA has prescribed procedures to process requirements. The formost reason for this is "fiscal control." Wherever and whenever expenditure of Government funds is contemplated, there are formal documents and procedures.

The first step in the procurement process involves approval or authority to process the requirement. It is essential that all requirements be validated and approved before processing. Once approved, the required funds mut be identified, certified, or committed. Only under unusually rare circumstances will requirements be processed without prior identification, certification, or commitment of funds.

Funding the Requirement

A commitment differs from an obligation. Funds are obligated when a contract is awarded. Only then is there a legal obligation to make payment. Funds may only be obligated after they are certified and authorized

as appropriated by Congress, and then only pursuant to such express limitations as may be set forth in the Appropriation Act. A certification or commitment, however, is the internal "ear-marking" of funds by which the Financial Management Division identifies both the types and amounts of dollars that are available for certain requirements.

Formation of Contracts

All contracts require three essential elements -- offer, acceptance and consideration. These elements constitute the means by which a contract is consummated, and the absence of any element prevents the formation of a contract. In NASA procurements, the Invitation for Bids or Request for Proposals constitute a request by NASA for offers of a certain nature. The bid or proposal submitted by the party solicited is in fact the offer, and the subsequent contract award constitutes acceptance. While ordinarily an offeror may withdraw or modify his offer at any time prior to acceptance, a different rule prevails when the offer is in the form of a bid, under formal advertising, made to NASA. In this situation, the offer may be withdrawn or modified as a matter of right only until the date and hour set for opening bids. Subsequent to bid opening, NASA has the power to award a contract on the basis of the offer submitted for a specified period of time.

The third essential element of any contract is consideration. Consideration, in most cases, is money passed by one party to the contract to the other party. In the absence of a statute specifically so providing,

no NASA employee has the power to give away money or remit any other vested right of the Government. Inasmuch as gratuitous promises generally are not enforceable, the existence of a valuable consideration - money - on the part of both the offeror and the offeree is an essential element of a NASA contract. Where there is lack of consideration and mutuality, the contract has been held unenforceable. A contract which at inception is not enforceable, however, may become valid and binding to the extent that it was performed. The requirement for consideration, an equitable money adjustment in the price, is equally applicable to supplemental agreements or contract amendments.

Delegation of Procurement Authority

The act of making a Government contract is assigned to a "procuring activity." "Procuring activity", therefore, means the organizational element of an executive agency which has responsibility to contract for the procurement of personal property and nonpersonal services. NASA is an executive agency (NASA PR 1.209). The "Procurement Office" at NASA Headquarters and NASA field installations are charged with the responsibility for making and administering purchases and contracts. Authority is granted, through proper channels, to delegate this responsibility to a "contracting officer", who is authorized to enter into or administer contracts and make related determinations and findings.

Principle of Agency

"Agency" in its broadest sense includes every relation in which one person acts for or represents another by his authority.

The President of the United States, the Nation's Chief Executive under

the Constitution, is responsible for the procurement of the government's needs. However, because Congress appropriates the requisite funds and establishes criteria for their expenditure, government procurement is really a joint undertaking. After World War II Congress standardized the procurement process by the enactment of several statutes. Those statutes granted the basic contracting authority to the heads of the appropriate agencies. By its very nature this function was required to be delegated to agents, that is, to the contracting officers.

Role of the Contracting Officer

A contracting officer is an agent of the Government. This fact cannot be overemphasized, since as an agent he must act within his authority. Generally the law of agency is applicable in the same manner to the United States as it is to private individuals. The important exception to this general statement, however, is the law dealing with apparent authority. Private individuals, as principals, are bound to the extent of the power they have apparently given their agents. Not so in the Government. The United States is bound only to the extent of the power it has actually given its agents, and unauthorized acts of such agents do not stop the Government from asserting their invalidity. While the scope of a contracting officer's authority is commonly limited by the statute conferring the authrity, it is not unusual to find that the authority delegated may be limited also by regulation promulgated pursuant to statutes. It is therefore incumbent upon a contracting officer to be aware of all limitations placed on his authority by statutes, NASA Procurement Regulation, or other directives.

Role of Scientific, Technical and Other Specialists in the Procurement

The area of responsibility of scientific, technical and other specialists encompasses a very wide and diversified field. Some of these responsibilities are summarized below:

1. Monitor the contractor's performance to assure compliance with research, development and other technical requirements of the contract. In this connection, notify the contracting officer of any deviations or exceptions taken by the contractor from the terms of the contract.

2. Review and approve progress reports, technical reports, and other items required for approval. Notify the contracting officer if said reports or other items submitted are to be rejected and state basis for rejection.

3. If performance is not proceeding satisfactorily or if problems are anticipated, it is essential that the contracting officer be notified as to the cause and recommended course of action from a scientific or technical standpoint. Immediate notification is essential to assure that the contracting officer takes appropriate action to protect NASA's rights under the contract.

4. In the event the contractor desires to propose a change, he should be advised to submit his request in writing to the contracting officer, indicating the effect the change will have on the contract terms and conditions. The scientist or technical personnel will be required to review the proposed change and advise the contracting officer as to whether the proposed change should be incorporated into the contract.

5. Assure that changes in work under a contract are not implemented before written authorization or a contract modification is issued by the contracting officer. Costs for work performed may not be allowed

if not authorized under the contract. Unauthorized changes could embarrass NASA as well as the contractor. No change or commitment should be directed without prior written authorization by the contracting officer.

6. Recommend in writing to the contracting officer changes desired in the contract with justification for the proposed changes.

7. Furnish scientific or technical advice relative to contracting officer approvals of subcontracts, overtime, travel to general-purpose meetings, etc.

8. Keep the contracting officer informed on the context of communications with the contractor in order to prevent possible misunderstandings or situations that could affect contract terms and conditions and become the basis of future claims against NASA.

9. Make site visits to the contractor's facility and check contractor performance and promptly advise the contracting officer of your findings. This may include the following:

a. Actual performance versus scheduled and reported performance. Inform contracting officer of any adverse conditions noted.

b. Changes in research or development performance which may affect financial status, personnel or labor difficulties, over-extension of facilities, etc.

c. Verify that the number of employees charged to the contract are actually performing work under the contract. For example, if the voucher claims that ten persons are assigned to the contract on a full-time basis, there should be a determination that individuals are performing work under this contract. Prompt notification of findings must be made to the contracting officer so that timely action could be taken.

CHAPTER 5

PROCUREMENT AND CONTRACTING DEFINED

The performance of work under many NASA contracts requires the assignment of technical direction and surveillance to scientific and technical personnel. The contract generally includes language that defines the authorities of these individuals. In the previous section we have discussed the roles of the contracting officer as well as the role played by scientific and technical specialists involved in the procurement discipline. The area of involvement depends, to a great measure, in the material, services, research and development and other requirements called for in the contract as well as the method of procurement utilized and the type of contract that will be issued.

Distinction Between Formal Advertising and Negotiation

Procurements for NASA are accomplished by either of two methods: by formal advertising or by negotiation. These principal methods of procurement are distinguished by the manner in which the contract is awarded.

Formal advertising has two main goals. One is to gain for the Government the benefits of full and free competition. The other is to give all qualified sources an equal opportunity to bid competitively. The procedures of formal advertising are often described as rigid or mechanical. This is true in the sense that they are established largely by law and regulation, and generally no deviations are authorized.

The formal advertising method of procurement has been the "preferred" method by Congress.

Negotiation, on the other hand, does not involve a rigid set of formalized procedural steps and may be defined to include all legal methods of procurement other than formal advertising. However, care should be taken not to equate competition with formal advertising as negotiation also is required to be competitive. The process of negotiation usually entails a series of proposals and counter-proposals in contrast to the "one-shot" procedure which characterizes formal advertising other than two-step advertising. Because of the "complexity" and ever "change-in-the-art" of NASA programs and projects, the negotiation procurement method is most frequently used.

Although it is in the area of negotiation where scientific and technical personnel exercise great latititude to act within the scope of work performed, nonethelesss their participation in formally advertised contracts also may be of significant value. A discussion of the formal advertised system is, therefore, provided as well as the highlights of two-step formal advertising.

CHAPTER 6

PROCUREMENT BY FORMAL ADVERTISING

To procure by formal advertising (NASA PR Part 2), The Government must know exactly what it wants to buy and must have precise specifications upon which potential contractors may base a firm bid. Use of precise specifications and fixed-price bids permits objective comparison among competitors. The bidding process, as illustrated on page 21-2 involves:

1. The formulation of a solicitation which includes specifications, terms and conditions and bidder's instructions. The solicitation package is called an "Invitation for Bid" (IFB).
2. Publicizing and solicitation of bids.
3. The preparation and submission of sealed bids by prospective contractors in accordance with the terms of the IFB.
4. Public bid opening of bids at the specified place, date, and time.
5. Award of the contract to a contractor determined to be responsible and responsive to the IFB and most advantageous to the Government, price and other factors considered.
6. Notification to unsuccessful bidders.

The following contract forms are used for procurements of supplies or services by formal advertising:

1. Standard Form 33 - Solicitation, Offer and Award.
2. Standard Form 33A - Solicitation Instructions and Conditions.
3. Standard Form 32 - General Provisions (Supply Contract)
4. NASA Form 250 - Additional General Provisions

5. Standard Form 36 - Continuation Sheet
6. Standard Form 30 - Amendment of Solicitation/Modification of Contract
7. Standard Form 26(when needed) - Award/Contract.

The resulting contract in formal advertising must be either firm fixed price or fixed price with escalation where the factors subject to escalation and the dollar ceiling are clearly specified in the Invitation for Bids. Escalation provisions are used to avoid unnecessary restriction of competition and unreasonable increases in prices due to the inclusion of contingency factors. Fixed-price contracts may be either definite or indefinite delivery type contracts, which may be either definite quantity contracts, requirements contracts, or indefinite quantity contracts.

Unless all bids are rejected, award is made by written notice within the acceptance time specified in the bid. All provisions of the IFB, including acceptable additions or changes made by a bidder in his bid, are accurately reflected in the award document. The award is an acceptance of the bid, and the bid and award constitute the contract between the parties.

IFB's may be cancelled after opening but prior to award if the contracting officer determines that:

1. Inadequate, ambiguous, or deficient specifications were cited in the IFB.
2. Supplies or services are no longer required.
3. The IFB did not provide for consideration of all cost factors.
4. On the basis of bids received, the agency's needs can be met by a less expensive article.

5. All bids received which are otherwise acceptable are at unreasonable prices.
6. Collusive bids have been received.
7. No apparent competition.
8. Specifications have been revised.

If the procurement is to proceed to award, the contracting officer commences the job of determining the contractor's responsibility. In advertised procurements, there are many points that may require evaluation and any one could be a valid basis for rejection of the low bidder. In some respects the evaluation of bids in an advertised procurement can be as sticky as for a negotiated contract. Therefore, it behooves the contracting officer to seek advice and consult with his scientific and technical counterparts.

One of the basic requirements of advertised procurement is the existence of adequate specifications and drawings which are supposed to describe only the actual minimum needs of the requiring agency. Insofar as possible, any restrictive features which might limit acceptable offers to one or a few suppliers' products should be eliminated. To encourage maximum competition, purchase descriptions of services should outline to the greatest degree practicable, the specific services the contractor is expected to perform.

In advertised procurement, one of the most effective means of evaluating the bidders' understanding of the requirement as described in the specifications is to analyze his price. In instances where adequate specifications cannot

be prepared because of cost, time, or other practical reasons, a purchase description may be prepared which describes the essential characteristics and functions of the item or materials required. Any bid which does not conform to the essential requirements of the IFB, such as specifications, delivery schedule, or permissable alternates, must be rejected as non-responsive.

In some cases the cost evaluation of bids can become confusing, complex, and time consuming. This is so because in advertised procurement the contract is awarded to the responsible bidder whose bid, confroming to the IFB, will be most advantageous to the Government, price and other factors considered. To determine the "most advantageous" price the evaluators must calculate, when applicable, such factors as:

1. Discounts. To determine the lowest bid, any discount offered will be deducted from the price on the assumption that the Government will take the discount unless the time period specified is less than that in the IFB. If no time period is stated, the Government will calculate it as taken.
2. Price escalation. If the IFB does not contain a price escalation clause, quoted prices which provide for escalation will be evaluated at the maximum possible escalation of the quoted base price.
3. T ransportation costs. F.o.b. origin bids generally are evaluated on the basis of the best available transportation rates and costs. Where particular types of carriers must be used, bids will not be considered which fail to involve the carriers specified in the IFB.

In many instances, bids may be submitted on the basis of either or both f.o.b. origin or destination. This can make the evaluation really complex.

4. Options. An option is defined as a provision in a contract under which, for a specified time, the Government may elect to purchase, at an established price, additional supplies or services called for by the contract, or may elect to extend the period of performance of the contract.

When a contract is to include an option clause, it must be included in the solicitation. Solicitations containing option provisions generally will be evaluated on the base quantity to be awarded, exclusive of the option quantity. If the Government really intends to exercise the option at the time of award, however, the solicitation will state that evaluation will be based on the total amount including the option quantity. Solicitations may also permit prices for the option quantity to be based on quantity ordered and dates ordered. The evaluation, then, of complicated options to determine prices most advantageous for the Government can become difficult.

In some procurement, there are certain characteristics of the product that cannot be described adequately in the specification or purchase description. In such cases bidders may be required to submit bid samples as a part of the bid. This permits thorough evaluation to assure the procurement of an acceptable product. Balance, facility of use, general "feel," color, or pattern are examples, but once a bid sample is submitted it will be examined

for all the characteristics listed in the IFB. A bid will be rejected as nonresponsive if the sample fails to conform to each of these characteristics.

Similarly, descriptive literature, such as cuts, illustrations, drawings, and brochures which show characteristics or construction of a product or explain its operation, may be required of bidders to satisfy the Government before award that the products meet the specification requirements of the IFB and establish exactly what the bidder proposes to furnish. This may be appropriate for highly technical or specialized equipment, or where design or style are important. Failure of the descriptive literature to show that the product offered conforms to the specifications and other requirements of the IFB will require rejection of the bid.

Samples and descriptive literature require careful evaluation and illustrate two more areas of concern in the selection of a contractor in advertised procurement. Other grounds for rejection of bids after evaluation are:

1. Failure to state a price, or to say that it will be the "price in effect at the time of delivery."
2. Unreasonable price.
3. Bidder debarred or ineligible.
4. Low bidder considered nonresponsive.

CHAPTER 7

TWO-STEP FORMAL ADVERTISING

Two-step formal advertising is a method of procurement designed to expand the use and obtain the benefits of formal advertising where inadequate specifications preclude the use of conventional formal advertising. It is especially useful in procurements requiring technical proposals, especially those for complex items. It is conducted in two steps:

1. Step one consists of the request for and submission, evaluation, and -- if necessary -- discussion of a technical proposal, without pricing, to determine the acceptability of the supplies or services offered. When it is necessary in order to clarify basic technical requirements, related requirements such as management approach, manufacturing plan, or facilities to be utilized may be clarified in this step.
2. Step two is a formally advertised procurement confined to those who submitted acceptable technical proposals in step one. Bids submitted in step two are evaluated and the award made to the lowest bidder.

Two-step formal advertising requires that the contracting officer work closely with scientific and technical personnel, and that he utilize their specialized knowledge in determining the technical requirements of the procurement and the criteria to be used in evaluating technical proposals and in making such evaluations.

An objective of this method is to permit the development of a sufficiently

descriptive and not unduly restrictive statement of the Government's requirement, including an adequate technical data package, so the subsequent procurements may be made by conventional formal advertising.

Conditions for Use

Two-step formal advertising is preferred to negotiation when all of the following conditions are present:

1. The available specifications or purchase descriptions are not definite or complete enough to permit full and free competition without scientific or engineering evaluation and discussion of the technical aspects of the requirement.
2. Evaluation criteria are definite enough for judging technical proposals properly. The criteria may include design and performance requirements, special requirements for operation suitability and ease of maintenance, necessary engineering experience in the scientific and engineering areas involved, and the need for special skills or facilities.
3. More than one qualified source will be available both before and after the technical evaluation.
4. Sufficient time is available for use of the two-step method.
5. A firm fixed-price contract (with or without escalation) will be used.

The two-step advertising method provides added flexibility in awarding procurements that include important technical considerations. It combines features of both formal advertising and negotiation. The freedom to weigh

factors other than price (step one) is a procedure drawn from negotiation; so too is discussion of technical proposals. Award to the lowest bidder in step two without further dealings with bidders preserves the essential aspects of formal advertising.

CHAPTER 8

SMALL PURCHASES

NASA PR 3.600 defines a small purchase as a procurement of supplies, non-personal services, and construction, the total cost of which is $10,000 or less. The objectives of the simplified purchase methods prescribed in the regulation are to reduce the administrative costs in accomplishing small purchases, to improve opportunities for small business concerns and minority business enterprises to obtain a fair proportion of Government purchases and contracts, and to eliminate costly and time-consuming paper processing. In order to execute small purchases successfully, it is necessary that all persons involved are aware of the overall scope of their responsibility and authority. Each contracting officer and purchasing agent should be aware of the limitation of his authority and may not exceed that authority. This regulation applies equally to small as well as to large purchases. Small purchase methods, however, should not be used for research and development work even though the resultant cost is less than $10,000.

The Small Purchase System

Under the small purchase system, purchases are accomplished by negotiation (NASA PR 3.603(a)) as authorized pursuant to Title 10 U.S.C. 2304(a)(3). Thus it is required that all purchases not in excess of $10,000 shall be negotiated except where it is clearly in the best interest of the Government to accomplish such purchases by more formal methods. It is also specifically required that purchases in excess of $10,000 not be broken down into small amounts solely to use this authority. The regulation applying to "breaking down" a procurement to facilitate quick contract action equally applies to large dollar value contracts. For example, you may not break down a con-

tract requirement estimated to exceed $5,000,000 for the sole purpose of retaining contract authority at the Center and thereby avoid referral to NASA Headquarters.

In small purchases, negotiation may be accomplished merely by letters, messages, or telephone calls. Regardless of the means used to communicate, every negotiation requires planning. An informal plan or list of discussion points is indispensable for conducting an effective negotiation, where it is merited or otherwise considered necessary in establishing a fair and reasonable price.

When quotations are obtained on related items such as laboratory supplies, small hardware items, automotive spare parts, office supplies, and other similar items, the purchasing agent may stipulate in the request for quotations that the Government reserves the right to award on an "all or none" basis; that is, the award may be made to the offeror who submits the lowest aggregate price rather than issuing a purchase order to each supplier on the basis of the lowest quotation on each item. Since the cost of writing a purchase order varies and may be rather expensive, the cost of purchasing on the basis of low aggregate cost may represent the greater saving.

Choice of Small Purchase Method

The choice of a particular small purchase method depends upon such factors as dollar value, type of item, delivery requirements and availability. Each of these factors must be considered because the purchasing agent has an option among several methods.

The first consideration is which method will accomplish the purchase in the most efficient and economical manner. The selection must tie in with exercise of the best possible judgment on the part of competent purchasing personnel. When a requirement is split, intentionally or unintentionally, into several purchases for the purpose of permitting the use of a particular method, it is a direct violation of prescribed policy. The following methods may be used:

1. Purchase Order: A purchase order is a document signed by a contracting officer and addressed to a supplier requesting future delivery of supplies, or the future performance of nonpersonal services, in accordance with the terms of the purchase order, in exchange for a promise by the Government to pay the price stated in the purchase order in the event of such delivery or performance. NASA Form 1379, Order for Supplies and Services, with applicable ancillary forms, may be used.

2. Blanket Purchase Agreement: The blanket purchase agreement is equivalent to a commercial "charge account." This method of effecting small purchases in the open market provides a simplified means for accomplishing small purchases of items of the same general category. The agreement eliminates the necessity of issuing individual purchase orders for small requirements by providing that purchases will be made by means of placing oral calls, or by informal memoranda when more convenient, under the blanket purchase agreement. All terms and conditions are agreed upon in advance and apply to each call placed under the agreement. Use of this method reduce administrative costs, saves manpower, and improves supplier relations by simplifying billing

and payment for small purchases. The blanket purchase agreement, therefore, is the Government's way of purchasing and saying, "Charge it."

3. Imprest Fund: Within the framework of NASA, an imprest fund is defined as a cash fund of a fixed amount advanced by an official Government disbursing office, without appropriation charge, to a properly authorized individual to effect immediate cash payments of relatively small amounts for authorized purchases of supplies and nonpersonal services. The fund generally is of a revolving type, replenished to a fixed amount as spent or used. An imprest fund is used by Government agencies in the same way as a "petty cash" fund is used in commercial businesses. Use is limited to individual transactions not in excess of $150, or under emergency conditions not in excess of $300. The imprest fund has long been recognized as a simple and economical method of effecting small dollar value purchases in the open market. It is to be utilized whenever such use will eliminate costly, time-consuming paper processes and certain controls over procurements which are difficult to justify from a cost viewpoint.

4. Purchase Order-Invoice-Voucher: One method of making small purchases is through the use of the Standard Form 44, Purchase Order-Invoice-Voucher [NASA PR 3.608-9]. Standard Form 44 is a multi-purpose form providing in one document a purchase order, a receiving report, a vendor's invoice, and a payment voucher. The primary use of the Standard Form 44 is for on-the-spot, over-the-counter purchases of supplies and nonpersonal services by authorized individuals, usually away from the purchasing office or at isolated agencies.

Competition in Small Purchases

Reasonable competition must be obtained when making small purchases. Competition is normally said to exist when two or more qualified sources of supply compete independently for Government requirements. The objective of competition is to assure that the purchase will be made to the best advantage of the Government, price and other factors considered, including the administrative cost of the purchase. The number of sources solicited should be consistent with the purchase of the required supplies or services but should not jeopardize the quality and timely delivery of requirements. Adequate competition for small purchases ordinarily can be obtained from sources within the local trade area; however, when deemed necessary, sources outside the trade area in which the procurement office is located may be solicited. While there are several factors that influence the number of quotations required in connection with any particular purchase, generally three qualified sources are considered adequate [NASA PR 3.604-2(b)].

Determining Price Reasonableness

To be effective, a purchasing agent should have a working knowledge of the products he is buying, the industry he is dealing with, and the NASA regulations within which he must operate. This knowledge will facilitate his decision as to the fairness and reasonableness of the price he is going to pay for a product or a service. The obligation to contract at fair and reasonable prices does not diminish as we move down the scale from high-dollar advertised and negotiated procurements to small purchases. The term "fair and reasonable" describes a conclusion as to price. The term signifies

that the price is acceptable to both NASA and the seller, and whether it is fair and reasonable will depend upon the factors the small purchasing agent looked at in reaching his conclusion.

Government Sources of Supply

Procurement from Government sources of supply is one of the major sources of supplies and services for executive agencies of the Federal Government. In fact, before a purchase may be entered into with a commercial contractor, Government sources must be examined and used, if possible. Several areas of Government sources are available: General Services Administration, the Committee for Purchase from the Blind and Other Severly Handicapped, and the Federal Prison Industries.

Use of NASA Forms 1379/1379B, Standard Form 147, Standard Forms 30 and 36

NASA Form 1379, Order for Supplies or Services, with applicable ancillary forms, are designed for use as a purchase order for small purchases not in excess of $10,000. As indicated in NASA PR 3.608-2, these forms are multi-purpose type and can be used as a purchase order, a blanket purchase agreement, a delivery order under a contract, a receiving and inspection report, a property voucher, and a document for acceptance by the supplier. Certain NASA Centers use special locally designed purchase orders to accomplish small purchases less than $10,000.

Conditions for Use

Although the administrative costs involved in the use of NASA Forms 1379, Standard Form 147 or other local forms may be greater than that of a blanket purchase agreement order or of the imprest fund, the forms have many singular advantages. They can be used when detailed technical specifications are involved, when a large number of line items are being purchased, and when the dollar amount exceeds the limit for use of the blanket purchase agreement or the imprest fund. NASA PR 3.608-2(b) outlines circumstances where NASA Form 1379 may be used or may be used with additional clauses.

Solicitation of Competition and Selection of Suppliers

When the purchasing agent determines to employ the purchase order method, he should solicit competition from commercial suppliers to the extent required as discussed under the section "Competition in Small Purchases." It is pointed out, however, that since the enactment of Public Law 93-356, dated July 25, 1974, which authorized the increase in the small purchase limitation from $2,500 to $10,000, revised procedures apply to solicitations covering small purchases. Solicitation of quotations orally may be limited to amounts less than $10,000.

The need to use a written solicitation form may become necessary to assure some documentation in writing to avoid misunderstandings between buyer and seller. Written quotations may be solicited by Standard Form 18. Quotations for supplies generally should be solicited on the basis of all transportation charges paid to destination unless there are valid reasons to the contrary. In soliciting quotations an effort should be made to obtain prompt payment discounts.

Evaluation of Quotations

Quotations received should be recorded on a bid abstract sheet or other work sheet used at the activity, as appropriate. Quotations for supplies should be evaluated inclusive of transportation charges from the shipping point of the supplier to the delivery destination. All quotations should be evaluated on the basis of any offered discounts consonant with the above criteria. Evaluation should also include any minimum order charge which might increase the cost of the material. Quotations that are indefinite as to price or are based on price fluctuations should not be considered for award by the purchase order method. Award of purchase orders should be made upon the basis of the lowest prices obtainable from responsible suppliers with delivery and specifications requirements.

Preparation and Issuance of Priced Purchase Order

The purchase order provides a certain degree of flexibility and protection to the Government in dealing with commercial suppliers. As stated in NASA PR 3.608-2(d), the various blocks must be filled out carefully to assure a clear understanding on the part of the supplier as to what is required.

CHAPTER 9

PROCUREMENT BY NEGOTIATION

Definition

The dictionary defines negotiation as a "mutual discussion and arrangement of the terms of a transaction or agreement." Procurement by negotiation is the art of arriving at a common understanding through bargaining on the essentials of a contract such as delivery, specifications, prices and terms. Because these factors are interrelated with many others, it is a difficult art and requires the exercise of judgement, tact and common sense. Only through constant alertness can a negotiator know where to be firm or where he may make permissive concessions in price or terms.

Negotiation in contracting is not a process of giving in or of mutual sacrifice to secure an agreement. It is an attempt to find a formula satisfactory to both parties. Professional negotiation is a means by which the buyer and seller, by a specialized process of communications called "bargaining," reach an agreement on the terms and conditions of the contract and on the issues involved that will reflect a balancing of the interest of the two parties.

It sometimes happens that one side or the other will attempt to gain a settlement heavily weighted in its own favor by a blunt use of bargaining strength. The buyer may do this when he finds that the seller is extremely anxious to secure the contract. Likewise, a seller, if he is

the sole source of a proprietary item, may take an arbitrary "take-it-or-leave-it" position. This is not negotiation, and while it may lead to an immediate short-range advantage, it generally results in hard feelings and some sort of retaliation at the first opportunity.

While negotiation is usually thought of in terms of initial pricing and terms and conditions, it may encompass many more areas in the NASA procurement cycle. NASA contracts often provide for changes in the original terms and conditions which will require negotiation at later dates.

NASA PR 3.2 sets forth the circumstances permitting negotiation. Procurement may be effected by negotiation under any one of 17 exceptions. The separate instances where negotiation is permissible are set forth on pages 21-3 to 21-5. Special forms used for negotiated contracts are set forth in NASA PR 16.102.

Negotiation has been defined simply as procurement by other than the use of formal advertising procedures; and it is characterized by the issuance of a Request for Proposals (RFP) similar in form to an IFB, in response to which proposals are received which subsequently may be modified or changed on the basis of results obtained during negotiation. Because of the complexities of NASA programs and projects, negotiation authority provided by exceptions (10) and (11) are frequently used.

Advertising factors covered earlier involve the inflexible process of sealed bids, public openings, and award to the low bidder who is both

responsible and responsive. Negotiation, on the other hand, is characterized as that method of procurement which may require discussions to resolve uncertainties relating to the requirement of price to be paid. In short, in negotiated procurement the Government has restored, to a large degree, the element of bargaining to the principles of contract formation. However, the auction technique, or the practice of disclosing prices of competitors to an offeror to obtain a price reduction, is prohibited.

Government procurement by negotiation, like procurement by formal advertising, requires that the contracting officer observe impartiality toward all offerors. While negotiated procedures are more flexible than advertised procedures, such flexibility demands a greater degree of care on the part of the contracting officer, as well as of other specialists involved in the procurement cycle, to insure that all competitive offerors are treated equally.

The determinations and supporting findings are documents required to justify the use of the authority to enter into contracts by negotiation, make advance payments, determine type of contract, determine estimated cost and fees to be paid under cost-type contracts. Their use and the need for them, as well as the level at which they must be executed, are covered in detail in the procurement regulations.

Prior to actually negotiating the contract, the contracting officer--with the advice of scientific and technical specialists, when required--

must solicit the maximum possible number of sources of supply to assure full and free competition. Usually this is done in writing by means of a Request for Proposals similar in form to the IFB. A principal difference between the RFP and the IFB may be the type of contract offered. Formal advertising employs the fixed-price contract; negotiated contracts may be cost or any other authorized type. The RFP should set forth all significant matters which affect the opportunity of offerors to compete on an equal basis, such as delivery schedules, type of contract, closing date, and special evaluation factors. The RFP should also warn offerors that award may be made without discussion of proposals.

CHAPTER 10

TYPES OF CONTRACTS

While there are basically only two types of contracts utilized by the Government, fixed price and cost reimbursement, within these categories there are a number of variations. At one end of the spectrum, the firm fixed-price contract places the total risk of performance on the contractor, and the contractor guarantees the performance of the contract; at the other end, the cost-reimbursement type of contract places the cost or performance risk on the Government, with the Government reimbursing the contractor for costs incurred under the contract. Thus, the cost-reimbursement contract is selected when the nature of the work cannot adequately be described nor can the cost be determined. Between these two extremes there are types of contracts which provide for a sharing of some or all of the performance risk factors. For example, in a fixed-price contract with escalation the Government assumes the risk of labor increases within specified limits, and under some forms of price redetermination clauses the Government assumes the risk of an increase in all costs up to a specified ceiling.

The amount of fees is limited by statute, and cost, cost-plus-fixed-fee, and incentive type contracts require Determinations and Findings justifying their use. It should not be assumed that in all cases the agreed upon fee is paid to the contractor. The contractor must earn the fee. He must perform the work, as required by the contract, in an acceptable manner -- then he is paid the fee.

Generally, the use of time-and-material and labor-hour contracts also must be supported by Determinations and Findings. In the case of formally advertised procurements, only a firm fixed-price, lump-sum, or fixed-price with escalation may be used, since the specifications are definite and price competition plays an important role in the award.

The selection of a contract type is generally a matter for negotiation and requires the exercise of judgment. Type of contract and pricing are interrelated and should be considered together in negotiation. The various types and their uses are illustrated on page 21-6 ofthis manual, however a short description of types of contracts follow:

Firm Fixed Price

This contract type is characterized by a lump-sum price not subject to adjustment. (The adjustment referred to in these discussions does not include contract modifications or change orders.) The risk of performance falls on the contractor. This type of contract should be used where detailed specifications are available. See illustrations on pages 21-7 and 21-8.

Fixed Price With Escalation

This contract type is characterized by a lump-sum price subject to upward or downward adjustment upon the occurrence of contingencies specified in the contract. These contingencies are matters beyond the parties' control, such as labor rates or market price indices. See illustration on page 21-9.

Fixed Price Incentive

This type of lump-sum contract is characterized by an adjustment formula in the contract which relates to the efficiency of the contractor. A target profit and target cost are negotiated, along with a profit formula. The contractor's profit increases or decreases according to the formula as the actual costs are less or more, respectively, than the target cost. The fixed-price

incentive contract is distinguished from the cost-incentive contract by the inclusion of a ceiling price. Costs in excess of the ceiling price are borne entirely by the contractor. See illustration page 21-10.

Fixed Price With Price Redetermination

This is essentially a lump-sum contract with adjustments within specified limits negotiated as actual costs become known. As in fixed-price-escalation contracts, the Government assumes the risk of contingencies which might occur. The price redetermination may be made either at specified times during performance or after completion of performance. This type of contract should be used in limited instances only. See illustrations on pages 21-11 and 21-12.

Cost Contract

The contractor is reimbursed for costs only and receives no fee. This type of contract is generally used for facilities contracts and research and development contracts with nonprofit organizations. See illustration on page 21-13.

Cost-Plus-Incentive-Fee

This type of contract is similar to the fixed-price incentive contract, discussed above, except that there is no ceiling price.

Cost-Plus-a-Fixed-Fee

The contractor receives a set fee and is reimbursed for all costs allowable under established cost principles.

Cost-Sharing Contract

The contractor generally receives no fee and is reimbursed for only a portion of his costs. This type of contract is used where the benefits of a research and development contract accrue to both parties.

Cost-Plus-Award-Fee

This type of contract involves a target cost, a base fee, and performance evaluation criteria. If the contractor's performance meets the stipulated criteria, an adjustment is added to the base fee up to a specified maximum limit. Conversely, if the contractor's performance does not meet the stipulated criteria, he may get a fee below the base fee. Caution is required in establishing the criteria for the base fee. The Government's subjective evaluation of the contractor's performance is not appealable under the Disputes clause of the contract.

Time and Materials/Labor Hour

These are contracts providing for supplies or services on the basis of direct labor hours at specified hourly rates and materials at cost.

The above are the major types of contracts. In addition, there are requirements contracts, indefinite delivery, letter contracts, basic agreements, and basic ordering agreements. A full discussion of these types and their proper use is contained in NASA PR 3.4.

CHAPTER 11

INITIATION OF PROCUREMENT

The request for contract services, called the Procurement Request or Purchase Request (PR), should contain most of the planning data which preceded the instant procurement action. Preparation of the Procurement Request is the responsibility of the initiator to insure that it contains a detailed description of the supplies or services being procured, including the specific technical information, drawings, specifications, or reports which the contractor will be required to furnish. Delivery schedule or time phasing should be defined.

The detailed description of the supplies or services to be procured is the heart of the Procurement Request. It is the "axle" around which the entire procurement operation revolves. It governs the method of procurement, the type of contract, the selection of the contractor, the performance of the work, and the delivery and acceptance of the item or services procured. Its preparation merits the most careful attention to detail by the PR initiator, since ambiguities, omissions, and deficiencies result in unacceptable products, increased costs, and potential litigation.

Certain portions of the detailed description of the requirement must be amplified or structured as required for specific type of procurement and commodity areas. The depth of the detail required in a description depends on such factors as cost, complexity, quantity, and other

characteristics of the procurement. The PR initiator should consult as early as possible with the negotiator to determine the level or depth required in all facets of the PR package.

It is a basic principle of law and regulations that all procurements be conducted so as to generate the maximum possible competition. The PR initiator must therefore, in describing his requirement, be vigilant to insure that it states only the actual minimum needs of the Government, and that, insofar as possible, it contains no restrictive features which might unreasonably limit the number of acceptable offers.

Specifications, plans, and drawings are descriptions of the technical and other requirements established for the supplies or services being procured. Specifications normally cover the material content of an item and often spell out procedures of determining how a requirement will be met. Standards and other documents may establish scientific, engineering and technical limitations and applications.

Specifications should set forth only the minimum requirements of the Government. Procurements can then be made at the lowest price obtainable consistent with the actual needs of NASA and funds available. Conflicting or ambiguous requirements are likely to be interpreted against NASA, since it supplied the specifications. The order of priority and limitations of different documents should be clearly stated; they should establish, in the event of conflict, whether specifications have priority over drawings, the relation of general specifications to detailed specifications, and the applicability of models or other documents that describe the supplies or services being procured.

Any specifications which require restrictive, narrow ranges of performance, dimensions, or other similar characteristics which may be found in the product of only one or two producers must be justified specifically by the initiator. Purchase descriptions may be used in lieu of specifications, when authorized by agency regulations, to set forth the essential characteristics and functions of the items or materials required.

Competition vs. Sole Source

While competition must be obtained whenever possible (NASA PR 3.802-2), there are circumstances where an organization or individual has exclusive or predominant capability by reason of experience, specialized facilities, or technical competence to perform the work within the time required and at reasonable price. In such a circumstance the initiating technical office may recommend, for approval by the appropriate authority, that only one organization or individual is qualified to perform the work or services and that a proposal be solicited only from this source. This recommendation shall be in writing, prepared as a separate document entitled "Justification for Noncompetitive Procurement," and shall set forth full and complete justification for the selection as required by NASA PR 3.802-3.

The Justification for Noncompetitive Procurement must fully express the circumstances which operate to make competitive negotiation impractical or not feasible, and it must explain the exact exclusive or predominanat capability the proposed contractor possesses which meets the requirements of the procurement. Additionally, the justification must include what considerations were given to other sources who have been determined not to possess the necessary qualifications or capability. Contracting officers and scientists and engineers

when their advice is considered necessary, must review carefully all noncompetitive procurements and exercise exceptional skill in negotiating to insure that prices or cost estimates are reasonable and the statement of work insures that the Government will obtain what is desired. Care should be exercised to determine if the scope of work could be reduced and determination made as to the possibility of obtaining future requirements of the same type by competition. Some information should also be furnished to indicate the circumstances that got you into the sole source situation in the fist instance.

Publicizing

All proposed procurements of $10,000 or more must be published promptly in the Department of Commerce synopsis called Commerce Business Daily, Synopsis of U.S. Government Sales and Contract Awards, informally known as "Department of Commerce Synopsis" or "Synopsis" as set forth in NASA PR 1.1003. The primary purpose of the "Synopsis" is to provide industry with information concerning current Government contracting and subcontracting opportunities. In those cases where particular expertise is required to perform a contract, an Advance Notice of Sources Sought may be published in the "Synopsis".

CHAPTER 12

STATEMENT OF WORK

Statements of Work Handbook (NHB 5600.2, February 1975) establishes guidelines to be used in preparing Statements of Work (SOWs) to assure a consistent approach throughout NASA. As stated in the handbook, it is primarily intended for use in developing SOWs to be included in RFPs. The handbook is directed chiefly towards major negotiated procurements where Source Evaluation Board (SEB) procedures apply, but much of the information is also applicable in preparing SOWs for smaller procurements. The handbook should serve as a ready desk reference for the preparation of SOWs.

Because of the importance of the SOW in the procurement process, this student manual will discuss the subject in great detail to highlight the significant role played by scientific and technical personnel in the preparation of the SOW.

Developing the SOW

One of the most important steps in the procurement process is developing a statement of work to be used in the solicitation of proposals and later in the contract. In this area scientific and technical personnel play a most significant role. They should invite the contracting officer to assist in this phase at the earliest stage. The statement of work must define clearly, precisely, and completely the obligations of both parties with respect to the effort to be performed. A clear-cut definition often becomes extremely difficult where research and development (R&D) is involved. The nature,

size, scope, complexity, funding, etc., of the procurement will determine the content of the SOW.

A SOW specifies what the contractor agrees to do and what NASA agrees to do. It provides the specifics of the "who," "how," "what," "when," and "where" of the contract. It is prepared on the basis of the information contained in the detailed description of the requirement as written by the PR initiator. To be both technically and contractually correct, it requires the close coordination of the PR initiator and the contracting officer.

Scientific and technical personnel are often reluctant to state positively something they know will be subject to change. It is in these areas that future changes will occur, and if the SOW is written in broad generalities, the vague SOW will present problems in determining whether a proposed change is in or out of the scope of the contract.

An important consideration in preparing the SOW is to avoid unnecessary data requirements and nice-to-have types of services, since they are easy to put into an RFP but sometimes are far more costly than their value warrants.

The SOW should be written so that both a contractor and NASA understand what results are expected. A good test of the quality of the SOW is whether a third party would be able to determine if the work is in fact completed by comparing the work accomplished with the SOW.

A good SOW facilitates an independent NASA cost estimate, pricing by the offeror, the preparation of cost and pricing data, cost analysis, negotiation, and contract pricing. The NASA cost estimate must be realistic and based on sound facts. It should not be based on "how much money" can I get.

The detail and clarity of the SOW control the chances for the contractor understanding what he is expected to do and for NASA's realization of its objectives under the contract. In other words, the detail and clarity of the SOW control the risks involved in the resulting contract. Risks have to be allocated between the parties. Risk allocation is determined by the selection of type of contract and method of procurement.

The SOW is normally aimed at the completion or accomplishment of specific objectives. Depending upon the nature of the work, the objectives could be delivery of a report, data, material specification, a design, hardware, etc. A level-of-effort type of SOW may be used either when continuing service is required for a specific period of time and at a specified rate of expenditure, or when uncertainties in the work make it desirable to limit the rate of effort and expenditure under the contract.

The SOW for cost reimbursement contracts should provide for the use of formal technical direction that will accomplish tradeoffs, alternate choices, redirection, and similar actions within the scope of the work, with the goal of minimizing contract changes.

Poorly written and ambiguous SOW's breed misunderstandings, controversy, litigation, delays, additional costs, and frustrations in achieving contract objectives. It is essential, therefore, that the need for corrective action in this regard be identified in the course of the contracting officer's review of the PR. Standards, criteria, and considerations to be taken into account in order to avoid the consequences of defective SOW's are set forth in the Statement of Work Checklist in paragraph 107 of NHB 5600.2.

Work Breakdown Structure

Some procurements, particularly those involving systems acquisitions, frequently lend themselves to breakdown under specific tasks. These should be detailed in the SOW. Special time sequencing of tasks should be specified as needed; i.e., tasks to be performed in parallel or in series or in more complex time sequences. Tasks may describe such work as analyses, hardware design, fabrication, or test. Criteria and specifications for technically evaluating task performance should be included in the PR package. The structuring of tasks or work breakdown units should provide easy comprehension; and each task should be of a size that is manageable and appropriate for cost collection. Performance goals may be specified when it is not practicable to establish firm specifications because of uncertainty in the state of the art. While goals are not firm specifications, a contract must require some minimum acceptable level of performance to insure commitment by the contractor. It is often useful, in this connection, to express a goal as a range, with the lower end of the range being the minimum acceptable level of performance.

Handbook for Preparation of Work Breakdown Structures (NHB 5610.1, February 1975) provides NASA guidelines for preparation of Work Breakdown Structures (WBS). This handbook describes a WBS as a family tree subdivision of effort required to achieve an end objective (e.g., program, project, contract, etc.). The WBS is developed by starting with the end objective required and successively subdividing it into manageable components in terms of size and complexity, such as program, project, system, subsystems, components, tasks, subtasks, and work elements. It should be product or task oriented and should include all the necessary effort which must be undertaken to achieve the end objective.

Solicitation of Proposals

Generally, Requests for Proposals shall be in writing and shall contain the information necessary to enable a prospective offeror to prepare a proposal. Careful drafting of the RFP is vital to the proper working of the competitive process. As stated earlier, particular effort must be made to develop an accurate statement of work in order to preclude ambiguities and to avoid misunderstandings which might otherwise surface at later stages of the procurement.

The RFP shall require that a proposal generally be in two parts: a "technical proposal" and a "business proposal." Each of the parts shall be separate and complete in itself so that evaluation of one may be accomplished independently of evaluation of the other. The RFP will provide that the technical proposal not contain any reference to cost. Resource information,

such as data concerning labor hours and categories, materials, subcontracts, travel, computer time, etc., shall be included in the technical proposal so that offerors' understanding of the scope of work may be evaluated.

Instructions to offerors concerning the business proposal shall require submission of cost information in sufficient detail to allow a complete cost analysis. Categories and costs of labor, materials, travel, computer time, as well as information with regard to contractor past performance, including contracts or subcontracts for like services or supplies, financial capacity, certifications and representations, and other pertinent administrative and business information should also be requested.

Evaluation criteria must be developed by scientists, engineers, and other technical personnel in conjunction with the contracting officer at the time of initiating the procurement request. While technical expertise is always a part of the criteria, such factors as management, cost, approach, etc., are of varying degrees of importance depending on the specific effort. It is important to note that evaluation criteria are not and should not be standard for all programs. The contracting officer will consider the technical and business management evaluations when establishing competitive range. It is important to note, that in most research and in highly technical studies the dollars proposed and/or overhead rates are many times of minor significance compared to the professional and/or technical phase of the effort. Here, the Technical Division Chief has a large responsibility for source evaluation, but in this respect the contracting officer also has to be satisfied. Availability of special types of facilities, and other essential factors as the assignment of key personnel and a strong project director, together with recent and past experience of the firm

in specialized areas, may be items for major consideration in evaluation of proposals. Other items for evaluation may be the assignment of the work within the firm, access to management, understanding of the work and the methodology proposed, together with the individual tasks as well as the overall plan to complete the work and time-phasing to meet requirements. The technical evaluation criteria as developed must be included in the RFP as well as the cost or price criteria.

The RFP must inform offerors of all evaluation criteria and of the relative importance or weight attached to each criterion, although there need not be stated a numerical weighting formula. Evaluation criteria shall be described fully enough in each RFP to inform prospective offerors of the significant matters which should be addressed in their proposals. The technical and business proposal instructions of the RFP must inform the offeror of all information deemed essential to proper evaluation of the proposal, so that all competitors are aware of all requirements and so that the differences in proposals will reflect the offerors' differing responses to unambiguous RFP requirements and criteria.

No factors other than those set forth in the RFP as evaluation criteria shall be used in the evaluation of technical proposals. The RFP evaluation criteria shall not be modified except by a formal amendment to the RFP.

Evaluation of Technical Proposals (Not Involving Source Evaluation Board)
Generally, technical proposals received by the contracting officer are forwarded to the technical evaluators for evaluation; the business portions of proposals shall be retained by the contracting officer for evaluation unless procedures provide for the furnishing of the business portion to the technical evaluators.

Technical evaluators, who may very well be scientific and engineering personnel, will evaluate each proposal in strict conformity with the evaluation criteria of the RFP. These responsibilities will include:

1. A determination regarding the contractor's understanding of the scope of the work.

2. A determination regarding the availability and competence of experienced personnel.

3. A determination regarding the availability of research, test, and production facilities.

4. An evaluation of the need for and/or use of ADPE.

5. An evaluation of the method of achieving the reliability required.

Each proposal will be scored in accordance with mission suitability factors and a technical ranking will then be compiled. The technical evaluators will identify each proposal as either acceptable or unacceptable. The technical evaluators shall determine whether any proposal which has been rated as unacceptable might be considered acceptable upon furnishing of clarifying data by the offeror, and the contracting officer will be so informed. The contracting officer will arrange for the submission

of clarifying data in writing or by consultation and furnish it to the technical evaluators for their consideration. Care should be given to the fact that a requirement for clarifying data may be viewed as the commencement of discussions, thereby necessitating conducting discussions with all offerors.

It is essential to the competitive procurement process that all information contained in offerors' proposals be maintained in strict confidence. In no event during the evaluation period shall any offeror be told the number of proposals received, prices, or the NASA cost estimate. Discussions with offerors relative to any aspect of the procurement shall be held only with the contracting officer or his authorized representative.

A technical evaluation report shall be prepared and signed by the technical evaluators, furnished to the contracting officer, and maintained in the contract file. The report shall reflect the ranking of the proposals and shall identify each proposal as acceptable or unacceptable.

The technical evaluation report shall also include a narrative evaluation specifying the strengths and weaknesses of each proposal and any reservations or qualifications which might bear upon the selection of sources for negotiation and award. Concrete technical reasons supporting a determination of unacceptability with regard to any proposal shall be included.

Evaluation of Business Proposals (Not Involving Source Evaluation Board)
Each business proposal requires some form of price or cost analysis. The

contracting officer must exercise judgment in determining the extent of analysis in each case. In high dollar-value procurements, the analysis should be thorough and the record carefully documented to disclose the extent to which the various elements of costs, fixed fee, or profit contained in the contractors' proposals were analyzed. The negotiation memorandum should also reflect the consideration given to the recommendations, if any, of the price analyst and the basis for nonacceptance or departure from the recommendations during the course of negotiations.

The contracting officer must appraise the management capability of the offeror to perform the required work in a timely manner. In making this appraisal he must consider such factors as the company's management organization, past performance, reputation for reliability, availability of the required facilities, and cost controls.

Competitive Range

The NASA PR requires that negotiated procurements be conducted under competitive procedures to the extent practicable. It follows, therefore, that written or oral discussions are required to be conducted so that competition is maximized, and that the Government receives the most favorable contracts.

During the evaluation process, those proposals not considered acceptable may be eliminated from further consideration because:

1. The proposal does not represent a reasonable initial effort to

address itself to the essential requirements of the RFP.

2. In R&D procurement, a substantial design drawback is evident in the proposal, and to make it acceptable would require virtually an entirely new technical proposal.

3. The proposal contains major technical or business deficiencies or omissions, or out-of-line costs, which could not reasonably be expected to be cured even after discussions with the offeror.

Necessary documentation must be prepared showing why the deficiencies of any proposal are believed to be of sufficient significance to warrant discontinuing the evaluation process at this point.

The remaining proposals are tentatively ranked in accordance with the established scoring system, if one is established. In any event, the proposals are reviewed with a view toward determining the proposals within the competitive range; namely, those which have a reasonable chance of being selected for final award. In making this determination, there is a potential for improving the competitive position of the proposals by written or oral discussions with the offerors. Determining which proposals fall within a competitive range depends upon the particular circumstances. Cost or price alone is sometimes controlling, but technical capability and other relevant criteria may be paramount. The decision as to which firms are and which firms are not within a competitive range is a matter of administrative discretion. There could conceivably be a business proposal in which the cost or price is so high that it seems to be completely out of the competitive range. Before

making such a determination, however, the contracting officer should consult with the project director, the scientist, or technical personnel to determine possible reasons for the apparently excessive price, or perhaps an unrealistically low price.

Written or Oral Discussions

Written or oral discussions are required to be conducted with offerors who submit proposals within a competitive range. This is done to assure that competition is maximized, and that the Government receives the most favorable contracts. Also, the initial number of offerors considered as being within the competitive range may be narrowed as a result of the written or oral discussions.

The requirements for conducting written or oral discussions need not be applied:

1. To procurements in implementation of authorized small business or labor surplus area set-asides.

2. To procurements where it can be clearly demonstrated from the existence of adequate competition or accurate prior cost experience with the product that acceptance of the initial proposal without discussion would result in fair and reasonable prices. This would only apply when the RFP notifies all offerors of the possibility that award may be made without discussion, and provided that such award is in fact made without any written or oral discussion.

Careful judgement should be exercised in determining the extent of

discussions. In some cases, good business practice may warrant having more than one round of discussions with all or some of those offerors considered in the competitive range. The time available, the expense and administrative limitations, and the size and significance of the procurement should all be considered in deciding on the type, duration, and depth of the discussions.

Discussions for Cost-Reimbursement Type Contracts and Contracts for R&D

The contracting officer, in concert with scientific and technical personnel should conduct written or oral discussions of the work to be done and the cost of the work with those offerors whose proposals are within the competitive range. The discussions are intended to assist the evaluators:

1. In understanding fully the proposals and their strengths and weaknesses.

2. In assuring that the meanings and the points of emphasis of RFP provisions have been adequately conveyed so that all offerors are competing equally on the basis intended by the Government.

3. In evaluating the key personnel proposed by each offeror.

4. In presenting a recommendation to the selection official that makes the discriminations among proposals clear and visible.

In cost-reimbursement type contracts and all research and development contracts, the contracting officer should point out instances in which the meaning of some aspects of a proposal is not clear; and instances in which some aspect of the proposal fails to include substantiation

for a proposed approach, solution, or cost estimate. However, where the meaning of a proposal is clear, and where the evaluators have enough information to assess its validity, and the proposal contains a weakness which is inherent in an offeror's management, engineering, or scientific judgement, or is the result of its own lack of competence or inventiveness in preparing its proposal, the contracting officer should not point out the weaknesses. Thus, discussions are useful in ascertaining the presence or absence of strengths and weaknesses.

Guidelines presented are not all-inclusive. Careful judgement must be exercised commensurate with all the circumstances of each procurement to promote the most advantageous selection, while at the same time maintaining the fairness of the competitive process.

The contracting officer should give each offeror a reasonable opportunity, with a common cut-off date for all, to support and clarify its proposal. An offeror may, on its own initiative, revise its proposal and make corrections or improvements based on written or oral discussions until the established cut-off date.

Discussions for Fixed-Price Contracts

In fixed-price type contracts the specifications ordinarily describe the Government's requirements with more particularity than is possible in cost reimbursement or research and development contracting. Hence, less emphasis is placed on an offeror's introduction of scientific, engineering, and management innovations.

The contracting officer in written or oral discussions should point out instances in which some aspect of a proposal contains a weakness in relation to the Government's requirements. Of course, the contracting officer should neither point out the relative strengths or weaknesses of a proposal in relation to those of other offerors, nor transmit information which could give leads to one offeror as to how its proposal may be improved or which could reveal a competitor's ideas. Also, the contracting officer should point out cost elements that do not appear to be justified and should encourage offerors to put forward their most favorable price proposals. In so doing, he should not discuss, disclose, or compare cost elements of any other offeror.

Conduct of Negotiation Prior to Selection

Subsequent to the written or oral discussions, and after receipt of best and final offers, the contracting officer in concert with scientific and technical personnel must decide whether information received is adequate to make a selection for award of a contract. When this is not the case, it may be prudent and necessary to conduct further discussions or final negotiations with those offerors remaining in the competitive range prior to the selection of the successful offeror.

Effective Negotiation

Every action in the early stages of the procurement process has one underlying goal: to achieve a contract agreement that is most advantageous to NASA considering the reasonableness of price and other factors. Of course, this objective is of utmost importance during negotiations.

Concern with price alone -- or price and most favorable contract type -- may not guarantee the best procurement. Delivery, quality, competence of the contractor, and other factors also require close attention. Analysis of each procurement will indicate which aspect must be stressed during negotiations.

The great advantage which negotiation has over formal advertising as a method of procurement is its flexibility. Where formal advertising is used, the discretion of procurement personnel is limited: the contract must be awarded to the lowest responsible, responsive bidder, with little or no weight given to other factors. Procurement by negotiation is less rigid than procurement by formal advertising; hence it requires considerable research and study to become a competent negotiator. To some extent negotiation is an art. To be successful, the negotiator needs a background of professional knowledge which must be brought to bear in the face-to-face discussions at the negotiation conference.

In conducting contract negotiations it should be kept in mind that there are four major objectives in the negotiation process. They are:

1. To select a contractor who is capable of performing under the contract.

2. To establish fair and reasonable prices and assure complete agreement on appropriate contract terms.

3. To develop sound relationships with contractors.

4. To obtain information which will be useful in subsequent negotiations.

The NASA negotiator should be armed with (i) a basic knowledge of all aspects of the requirement; (ii) an independent cost estimate; and (iii) a price and cost analysis -- all of which should place him in an informed position to discuss and challenge any aspect of an offeror's proposal. Effective negotiation does not necessarily require an aggressive personality; knowledge and preparation are infinitely more important. Here the negotiator should recognize that price is only one aspect, and that the primary objective is to assure delivery at the time and place required; and the contractor's profit should relate to the risk he assumes. In cost-reimbursement contracts and certain fixed-price contracts the reduced risk should be associated with less fee or profit.

The two techniques for ascertaining the reasonableness of price are known as price analysis and cost analysis. The contractor is the primary source for the cost or pricing data which is analyzed to determine the reasonableness of a proposed price. Until 1962 contractors were not required to submit their cost data in any specific fashion. Congress was concerned about the manner in which contracts were being negotiated, and, to prevent defective pricing and the payment of what may be unearned profits to contractors, it enacted Public Law 87-653, commonly referred to as the Truth in Negotiations Act, on September 10, 1962.

The principal effect of this Act was to establish a "competitive range" for negotiations and to require cost and pricing data to be furnished by prospective contractors prior to negotiation of contract prices. It requires con-

tractors to furnish "accurate, complete, and current" data; to certify that the data furnished meets those requirements; and to agree to a contract provision giving the Government the right to reduce the price unilaterally by any amount it was increased as a result of defective cost and pricing data.

Award of Contract

After the close of negotiations and the receipt of any addenda to proposals, the contracting officer will select for award the offeror(s) whose proposal(s) offers the greatest advantage to NASA, price and other factors considered. Research and development contracts should be awarded to those organizations, including educational institutions, which have the highest competence in the specific field of science or technology involved; however, awards should not be made for research and development capability which exceeds that needed for the successful performance of the particular project.

Price may not be disregarded in selecting a contractor. This is particularly true where more than one acceptable offer from technically qualified sources remains for consideration after conduct of negotiations. If a lower priced, lower scored offer meets NASA's needs, acceptance of a higher priced, higher scored offer shall be supported by a specific determination by the contracting officer that the technical superiority of the higher priced offer warrants the additional cost involved in the award of a contract to that offeror.

Negotiation Memorandum

Upon completion of negotiations, a negotiation memorandum should be prepared. The negotiation memorandum is a complete record of all actions leading to the award of a contract. It should be in sufficient detail to explain and support the rationale, judgments, and authorities upon which all decisions were predicated.

Memoranda of negotiation should give the background necessary to identify and understand the procurement and should pinpoint all pertinent considerations. Such memoranda should show the agency position, how it was arrived at, and how it compared with or contrasted to the contractor's proposal. It also should recap the main opposing arguments which have been made. It should detail the agreement and explain the principal reasons why it is a sound pricing arrangement for the agency.

CHAPTER 13

SOURCE EVALUATION AND SOURCE SELECTION
(Use of Source Evaluation Board)
(NASA NHB 5103.6A Dec. 1975)

As procurements increase in complexity, dollar value, and urgency, the formal source selection process and the sound choice of a contractor deserve utmost emphasis and the attention of top level people. Thus, a diverse array of technical, management, and professional skill is required to evaluate the proposals of competing contractors seeking to do the work. This sophistication is dictated by the technical uncertainties that are characteristic of the effort to develop, produce, and utilize the aeronautical and space systems peculiar to the NASA mission.

The selection decision, therefore, must be retained at an organizational level which possesses the visibility, knowledge, responsibility, and accountability to make an enlightened choice. NASA PR 3.804-3 states that Source Evaluation Board (SEB) procedures are appropriate for competitive negotiated procurements when it is likely that the estimated cost of the contract will exceed $1,000,000. It should be noted that Source Evaluation Board procedures are not used for Architect-Engineer services and contracts for which the procedures have been specifically waived.

If we were to summarize the objectives of formal source selection, it would be to assure that:

- there is an impartial, equitable, and comprehensive evaluation of the proposals,
- the contractor or source whose proposal offers optimum satisfaction

of the Government's performance, schedule, cost, mission suitability, experience and past performance and other objectives is selected,

- we improve the effectiveness and consistency of the methods used to review and approve the evaluation findings within NASA, and
- we promote a better understanding and acceptance of the selection decision, particularly by industry and protect confidential and proprietary information.

To accomplish the aforementioned objectives, the Source Evaluation Board will make a searching analysis of the proposals and other factors bearing on the performance of the prospective competing contractors. The evaluation process must be thorough, factual, and completely impartial.

The various steps in the evaluation, elimination, and final selection from among competing sources requires the exercise of judgment by all officials concerned and all Board members, on the basis of overall technological and business considerations rather than adherence to any arithmetical or other mechanical scoring system.

Using a "board" or a "team" or any working group to evaluate "contractors" or their "proposals" serves a useful purpose only when it brings together the proper balance of:

- expertise
- competence
- experience

These attributes are needed to contribute effectively to the evaluation

decision. NASA Source Evaluation Board Manual, NHB 5103.6A, provides general and specific guidance to Source Evaluation Boards in the evaluation of competing companies and their proposals in negotiated procurements. Specific roles of key participants are described, such as: Source Selection Official, SEB, SEB Committee and SEB Panel.

Initial Functions

The life of the SEB begins with approval of the procurement plan and receipt of a designation letter by its Chairman. The SEB and committee members will be briefed concerning security aspects of the SEB process.

Normally it would not be practical for SEB members to meet in continuous session, since members have significant management and technical responsibilities back in their parent organizations.

During the introductory or initial sessions, the SEB members will review the approved procurement plan to familiarize themselves with:

. the scope of the procurement
. the significant features of the plan
. the time schedule for effecting the action
. its own milestone schedule

Also, during the initial meeting, determinations are made regarding the number of people to be involved, space and equipment requirements, document control, duties and responsibilities of the Recording Secretary, minutes of meetings, and access to work areas.

Weights and Scoring Systems

A most important factor to be considered is the method of assigning weights and scoring of each criteria. A wide range of "factors" many of them highly specialized must be reviewed and evaluated in major procurements. Any departure from the established system which is prompted by judgment factors outside the system is proper only when the same treatment is extended on an impartial basis to all other qualified proposals.

All contractor proposal evaluation techniques, particularly those for complex systems, require that increased emphasis be given to priority areas. An integral part of this technique is the capability for providing such increased emphasis, where required. The method for directing this emphasis is through the assignment of weights by percentage or numerical distribution to priority areas of emphasis, based upon 100%, or perhaps 1,000 points, for the complete proposal. Within the priority areas, segments can be emphasized or deemphasized by the weighting or percentage distribution. Weights can be assigned to all levels of the evaluation and to all segments at each level with limitations. While numerical weights generally are not assigned to "cost," "experience," "past performance," they may be considered in making the award. For example, the amount of subcontracting a prospective offeror intends to do with small business or minority business firms may advantageously be considered in making the award.

Two cautions must be kept in view when dealing with any scoring system:

1. It is only as good as the judgments made in selecting criteria and weights.

2. If care is not exercised to limit subdivisions to be rated,

the scoring system may introduce an "averaging out" effect that inhibits selection based on the really significant discriminators among the offerors.

Essentials of the Evaluation Process

The principal purposes of evaluation in the source selection process are to determine those proposals which have a high probability of meeting NASA requirements within established tolerances. Additionally, it must be determined which proposals are responsive; and from among the proposals reviewed, which one(s) provide the highest probability of achieving the satisfaction of the Government's objectives. In making these determinations in the manner described in the evaluation criteria narrative descriptions contained in the RFP, it is necessary to conduct the technical review of:

1. Mission Suitability: Relevant factors include:

a. Understanding the requirement, that is, how well the offeror comprehends what the work is and what data should be submitted.

b. Management plan, that is, the offeror's approach for efficiently managing the work as demonstrated by the proposed organization, the recognition of essential management functions, and the effective overall integration of these functions.

c. Excellence of proposed design as it may pertain to hardware procurement, that is, does it promise to provide the required performance at a reasonable cost.

d. Key personnel - number and identity. Who will be directly involved to assure successful accomplishment of the contract.

e. Corporate or company resources, that is, are the proper skill mixes and numbers of people to do the work on schedule being offered? Are the general type and capacity of facilities and, where required, special test equipment, being offered suitable and adequate to assure timely performance of the work? If not adequate, has the offeror demonstrated the ability to acquire them.

Mission suitability factors are numerically weighted and scored.

2. Cost Factors: In reviewing cost factors a determination is made as to the probable cost differences among the offerors within the competitive range and their causes. In other words, what each offeror's proposal will cost the Government if he wins the contract. This is the probable "cost of doing business."

Cost factors are not numerically weighted and scored because the weight to be accorded can only be judged after determining the relative merits of "mission suitability."

3. Experience and Past Performance: To make an assessment regarding experience and particularly past performance may be extremely difficult. Experience is the accomplishment of work of the offeror which is comparable or related to the work or effort required under the instant procurement and its objectives. Past performance is especially important, that is, how well the offeror did on earlier work for the Government can be a very significant indicator of how well he can be expected to perform the job at hand.

Experience and past performance are not weighted and scored as evaluation factors. Any trade-off decision is made by the Selection Official. And, as stated earlier, these factors may be considered in selecting the winning contractor.

4. Other Factors: Relevant factors include:

a. Financial condition and capability.

b. Priority placed by the corporate level on the work being proposed in regard to other in-house work.

c. Stability of labor-management relations.

d. Extent of proposed small business and minority enterprise participation in subcontracting arrangements.

Information regarding these factors is generally available in the form of pre-award surveys, NASA Inspection Reports, facility capability reports, audit reports and the like. These factors are not weighted and scored as evaluation factors to avoid the possibility of an "averaging out" effect, but, they are and should be considered in the overall determination for award of the contract. You must remember that a sound basis upon which an informed and objective selection will be made has to be provided to the SEB. Evaluation itself is a mixture of: (i) fact finding, (ii) reporting, and (iii) professional judgment.

Cost and Pricing Data

In complex, high-dollar value procurements, the accountants, and auditors on the evaluation team are most interested in comparative balance sheets and the detailed cost or pricing proposals that are usually submitted as separate parts of the business management proposal.

NASA PR 15.201 provides basic principles and procedures applicable to the evaluation of costs that are submitted by an offeror in his business management proposal. Briefly, let's examine a few of these definitions:

a. The total cost of a contract is the sum of the allowable direct and indirect costs allocable to the contract, less any allocable credits. Any generally accepted method of determining or estimating costs that is equitable may be used.

b. Factors to be considered in determining the allowability of individual items of cost include: reasonableness; allocability; application of "generally accepted" accounting principles and practices; and any limitations or exclusions cited in NASA PR Part 15 as to types or amounts of cost items.

The techniques of cost and price analysis are used in the first step of the process to evaluate the company's price proposal. The starting point is the cost or pricing data furnished by the offeror or contractor. Public Law 87-653 requires prime contractors to submit cost or pricing data under specified circumstances, and to certify that the data submitted is accurate, complete, and current. To foster "truth in negotiations," the law requires the seller to make full disclosure of the bases of his proposal. The NASA PR picks up this requirement and adds the procedures necessary to make the law operative.

The instrument for making this disclosure of cost and pricing data is the DD Form 633 and its related dash models designed for specialized procurement situations. The DD Form 633 will be used in every negotiated procurement expected to exceed $100,000 ($250,000 if so indicated), or if desired it may be used for contracts less than $100,000 when you need the data to determine if you have adequate price competition.

Final Scoring of Proposals

Final scoring of proposals on mission suitability, experience and past performance and other factors are performed after considering all Committee reports and all other data developed or obtained through plant visits, written or oral discussions, revised proposals, rescoring, and re-evaluating. The final scores will be the culmination of all of these efforts. A written audit trail must be maintained, including a step-by-step account of the events leading to the final scores. The scores must represent the collective judgment of the Board, and reasons for differences in the scores should be apparent and readily explainable to and understood by the Source Selection Official. The Board must also complete a report on its analyses and findings with respect to cost factors -- or the business management proposal.

It is apparent that the scope of the evaluation performed by the SEB requires a thorough and detailed appraisal of the proposals and an evaluation of the probability of a quality performance within the specified time. The SEB may question the reports of the supporting Committees until it is satisfied that all essential elements have been covered.

SEB Report

The SEB report documents the findings of the Board and is signed by all members. If any member takes exception to the findings, he may present his position in writing, which is then made an annex to the report.

The SEB report should place emphasis on substance. The presentation should consist of the written Board report and an oral briefing. For the oral presentation, flip charts or viewgraphs are appropriate where the nature of the presentation permits.

Multiple Selections

While SEB procedures contemplate that the Source Slection Official will be in a position to select a single source for the procurement subsequent to the Board presentation to him, a variety of considerations may lead theSource Selection Official to direct that contract negotiations be conducted with two or more firms. Such negotiations are to result in complete contract documents signed by the offerors and the contracting officer which may be accepted by the agency upon determination of the winner by the Source Selection Official.

Final Negotiations

The objectives of final negotiations are essentially the same as those where a single offeror has been selected for final negotiation and award; that is, each offeror's correctible weaknesses should be pointed out and corrected during negotiations, using whatever technical and other information is known and which the Government has the right to use. Similarly estimated costs or prices should be negotiated to the most favorable levels practicable.

The final contract negotiation process differs from the written and oral

discussions previously held with offerors in the competitive range. The written and oral discussions have the specific function of obtaining information for evaluation and selection purposes, while the final contract negotiations have the additional function of presenting that information in contractually binding form. For this reason it is essential that each offeror be brought to the most favorable terms that the negotiation process can produce, including technical and scientific approaches, management arrangements, and estimated costs (or fixed prices where applicable), and cost element ceilings as appropriate.

CHAPTER 14

QUALITY ASSURANCE, INSPECTION, AND ACCEPTANCE

One of the most exacting tasks in the procurement discipline is to assure that supplies and equipment meet the contract requirements. The nature of NASA research and development, aeronautical, and space programs require that all practicable actions be taken by Government agencies, as well as by contractors, to insure the quality and reliability necessary for successful hardware development and mission accomplishment. Thus, it is not surprising that NASA defines quality assurance as: "a planned and systematic pattern of all the actions necessary to provide adequate confidence that the end items will meet all specified requirements" (NASA NHB 5300.4 (2B, App. A).

Quality assurance encompasses a number of dimensions or functions: For example:

1. Dimensions would cover:
    a. Reliability
    b. Maintainability
    c. Transportability
    d. Safety
    e. Environment
    f. Human factors engineering

2. Functions would cover:
    a. Quality control (production)

b. Inspection

c. Calibration

d. Metrology

Responsibility for Quality

The primary responsibility for assuring quality in an item rests, obviously, with the contractor. Producing an article or equipment that conforms to the requirements of the contract is what he is being paid to do. He must determine that the items meet requirements before submitting them to the Government. And in NASA contracts, he is often required to maintain and furnish substantiating evidence of this conformance. It is therefore an absolute necessity, that quality requirements are definitized and included in procurement documents as early as possible. The Government, on its part, must determine to its own satisfaction that the contractor has carried out his responsibility. This it does by varying degrees of inspection.

Delegation of Responsibility to Other Agencies

NASA has the option to delegate certain quality assurance responsibilities to other Government agencies who have been authorized by appropriate delegation to perform such functions. NASA Form 1430, Letter of Contract Administration Delegation shall be used. When delegation is made, the agency, e.g. Defense Contract Administration Services, must be introduced to NASA's quality assurance approach to a particular procurement early in the procurement cycle.

Quality assurance in aeronautical and space systems contracts must ensure that

quality requirements are determined and satisfied throughout all phases of contract performance - beginning with preliminary design and concluding with flight operations and flight operations analyses.

Inspection

Inspection is defined as the "examination of supplies and services to determine whether they conform to contract requirements, which include all the applicable drawings, specifications and purchase descriptions." It includes examining and testing raw materials, component parts and intermediate assemblies when appropriate. Inspection does not constitute acceptance. Nor does it relieve the contractor of responsibility for defects discovered before acceptance. Testing is an element of inspection and means the determination, by technical means, of the physical and chemical properties (or elements) of materials and supplies by the application of scientific principles and procedures. The most obvious and compelling reason for inspection and testing is to avoid a failure.

Extent of Inspection

Over a period of years, the Government has shifted from a policy that required 100% of the items to be inspected by Government employees to one of relying, to a much larger degree, on the contractor's own inspection system. In fact, the contractor, is often now required, by the contract, to establish and maintain a system of inspection or other quality control to keep Government inspection to a minimum. The type and extent of testing required for each contract depends, to a great extent, upon the particular items being procured.

For example:

1. Items involving small loss in case of defects would not require detailed inspection.

2. Items bought from contractors, who replace or correct without cost, would not require as detailed an inspection as other items.

3. The cost of inspection would also be a factor in determining the extent of inspection.

Contractor Responsibility

1. Keep records of all inspections performed on the items being procured.

2. Perform tests and examinations as required in the contract, except those reserved to the Government.

3. Establish and maintain an inspection system satisfactory to the Government.

4. Provide the documentation required by any quality control procedure required in the contract.

5. Provide "reasonable" facilities -- that are both safe and convenient -- for inspection by the Government on the contractor's premises, at no cost to the Government.

Government Responsibility

1. Determine how much and what kind of inspection it wants and how much and what kind of inspection it wants to leave to the contractor.

2. Determine the amount of "follow-up," overview, or actual participation it wants in the inspection process.

Methods of Inspection by Government or Contractor

1. Visual inspection. Conformity to contract requirements would be at once evident to the eyes of the expert examiner.

2. Dimensional inspection. Use of graduated scales, micrometers, or calipers to measure the dimensions of the contractor's product. Another example of this method is the use of "go/no-go gauges" to determine whether the contractor's product falls within the range of tolerance specified in the contract.

3. Functional inspection. Determine whether the product meets the performance requirements of the contract; e.g., running an engine continuously to determine its ability to perform over the period of time specified.

Conduct, Time, and Place of the Inspection

The standards applied by inspectors and contracting officers must be reasonable in the light of the end use of the product or the quality of the service. The time of the inspection is generally spelled out in the contract. Inspection can take place at all times and places to the extent practicable during the period of manufacture. Inspections should be performed in such a manner as will not unduly delay the work. In any event, the inspection contemplated in the contract must be performed prior to acceptance. The contract will usually designate the place or site of inspection. Generally, supplies will be inspected at the source, i.e., the factory or place where they are made, or at their destination.

Disposition of Nonconforming Supplies

The Government always has the privilege of rejecting the nonconforming supplies outright, extreme though that course of action may be. In some cases the Government is required to give written notice stating the reasons for rejection, and in such cases the written notice must be given promptly.

The more normal procedure for the Government is to allow the contractor to replace or repair the nonconforming items if this can be done within the required delivery schedule. Such correction or replacement must be done without additional cost to the Government, however. Unless the contracting officer gives permission to have the nonconforming product repaired in place, the contractor must remove such product from the place of delivery at his own expense. The contracting officer may also require the replacement of a defective product, under the provisions of the Inspection and Acceptance clause, with a product that conforms to specifications.

Reduction in Price

If correction cannot be made within the contract delivery schedule, the contractor can be required to deliver the supplies at a reduction in price which is equitable under the circumstances. Failure of the contractor and Government to agree on a price is a question of fact within the Disputes clause. For reasons of economy or urgency of the requirement, acceptance of supplies or services which do not meet all contract requirements may occasionally be desirable. When nonconforming supplies are accepted, the contract must be modified and consideration obtained. In cases where the contracting officer

proposes to accept nonconforming supplies, he should obtain the approval of the requiring agency.

Acceptance

Acceptance is the act by which the Government assents to the ownership of purchased items and is usually accomplished by executing the acceptance and receiving certificate in an inspection and receiving report. By the act of acceptance, the Government acknowledges that the product, supplies or services are in conformity with the terms of the contract (subject of course to other terms and conditions of the contract). This includes conformity with the provisions relating to quality, quantity, packaging and marking. However, acceptance is not final where non-conformity is due to latent defects, fraud or such gross mistakes as may amount to fraud.

Time and Place

Acceptance is never accomplished prior to inspection unless the contracting officer determines that it is in the best interest of the Government to do so. In such a case, the contract should be amended to permit the Government to accept or reject within a reasonable time after delivery. Acceptance usually takes place:

1. At the time of final inspection.

2. At the time of delivery to final destination (although it is possible for it to precede or follow delivery).

3. Within the period specifically set forth in (i) cost reimbursement supply and time and materials contracts and (ii) in cost reimbursement R&D contracts.

Each contract must specify the point of acceptance. Contracts requiring delivery F.O.B. destination must provide for acceptance at destination. Contracts requiring delivery F.O.B. origin will usually provide for inspection at the point of origin.

Certificate of Conformance

The contracting officer may require a clause in the contract in which the contractor certifies that the supplies or services conform to the contract. This is the certificate of conformance. The certification generally eliminates the need for actual inspection by the Government.

CHAPTER 15

MISTAKES IN BIDS, PROTESTS, DISPUTES, AND CLAIMS

Government contracts are a fertile breeding ground for misunderstandings and disagreements between contractors and contracting officers, engineers, technical personnel, and practically everyone who is involved in the contractual relationship from its inception to completion. In civil law, disagreements and controversies between the contracting parties have only one forum for settlement - the courts. Court dockets are choked with cases and years can pass between the initiation of litigation between contracting parties and the final adjudication of matters at issue.

Because of the huge number and significant dollar value of contracts entered into by all the agencies of the Government, procedures have been established to provide expedited relief for Government contractors who find themselves in disagreement with the contracting officer. Our concern here is with three of these procedures:

1. Mistakes in Bids and Bid Protests: Contractors dealing with the Government are provided means of reconciling misunderstandings and disagreements with the contracting officer. Most of these deal with unsuccessful bidders or offerors who are protesting awards of contracts to others. Some are concerned with mistakes in a bid or offer before or after award, or, with reforming or rescinding contracts which are obviously unfair to the contractor.

The General Accounting Office (GAO), under the direction of the Comptroller General, is in the legislative branch of the Government and is responsible

only to Congress. It is the "watchdog" over the expenditure of appropriated funds. The GAO has the power to settle all claims by or against the Government and all accounts in which the Government has an interest as either debtor or creditor.

The GAO has the responsibility, when specifically requested, to review bid protests, bidding procedures, and the meaning and effect of contract terms and specifications to insure competitive bidding. To expedite resolution, however, GAO has granted to NASA the authority to make certain administrative determinations set forth in NASA PR 2.406. Nonetheless, the Director of Procurement may forward to GAO any doubtful cases. Also, if a contractor's request for correction of an alleged mistake is denied by the Director of Procurement, the contracting officer shall so notify the contractor. The contractor may, if he so desires, appeal the decision to the GAO.

Decisions of the Comptroller General are binding on all Government agencies to the extent that such decisions are applicable to like factual situations. They are published and circulated widely throughout Government and industry.

2. Disputes and Appeals: Every NASA contract contains a disputes clause which provides for the settlement of claims and disputes which concern questions of fact and which arise during the performance of the contract.

Such claims are presented by the contractor to the contracting officer who renders decisions which must satisfy certain formal requirements, including finding of fact upon which he bases his decisions.

In the event the contractor disagrees with the decision of the contracting officer, the clause provides him 30 days after receipt of the contracting officer's decision to furnish to the contracting officer a written appeal addressed to the Administrator of NASA.

This appeal will be heard by the NASA Board of Contract Appeals.

Appendix "A" of the NASA PR prescribes the procedures for the adjudication of appeals before the NASA Board of Contract Appeals arising from NASA contracts.

3. Extraordinary Contractual Adjustments: By Public Law 85-804, August 28, 1958 (now codified as 50 U.S.C. 1431-35), Congress gave the President authority to make, amend, or modify contracts "without regard to other provisions of law" if such action would facilitate the national defense during a national emergency. One purpose of this legislation is to allow the executive branch to grant relief to government contractors in certain extraordinary situations that might otherwise have to be handled through private bills passed by Congress itself. The Administrator, to whom the President has delegated this power, exercises it through the NASA Contract Adjustment Board, which he has appointed to deal with all requests made by contractors under the Act. NASA PR Part 17 establishes standards and procedures.

It should be emphasized that Public Law 85-804 permits relief to contractors only in specific, well-defined situations and then only as a last resort, when no other adequate legal relief is available. The law is not intended

To serve as a remedy for the carelessness of either NASA contractors or NASA's own personnel.

Three types of relief are possible under Public Law 85-804:

a. Contractual amendments without consideration

b. Amendments correcting mistakes and ambiguities.

c. Amendments formalizing informal commitments.

CHAPTER 16

CONTRACT ADMINISTRATION

What Is Contract Administration?

For a layman unfamiliar with the procurement process, it is easy to assume that once a contractor has been selected and a contract signed, the purchase is consummated and little, if anything, remains to be done. While this may be true in a limited number of off-the-shelf items, it is just not so for the vast majority of things that the Government and particularly NASA buys. The equipment, end items or supplies must be developed or made over a period of time and in the process, the contractor must be paid, and checked from time to time, to be sure that the Government is getting - and will get, what it is paying for. For want of a better phrase, this post award activity is called contract administration.

Purposes and Amount of Contract Administration

The primary purpose of contract administration is to assure that the Government is getting what it is paying for. Another purpose is to assure that the Government is giving to the contractor what was promised in the contract. The amount of contract administration (supervision, checking or auditing) that is required varies considerably with the type of contract. In the cost reimbursement contracts, the cost responsibility of the contractor, as we have seen is low -- the cost risk of the Government is high. Therefore, the amount of contract administration or supervision in such contracts may be expected to be greater. The fixed price type contracts, on the other hand, place considerable cost responsibility on the contractor. In such contracts, the amount

of Government administration should, in most cases, be considerably less. The contract administration function, then, is one of vital importance - equally as important as the job of awarding a sound contract in the first instance.

Elements of Contract Administration

The major elements of contract administration include monitoring of performance, contract modifications, consent to subcontracts and purchase orders, property administration, inspection and acceptance, and closing contracts. Many of the elements of contract administration are performed by various Governmental personnel; however, the responsibility for contract administration rests solely with the contracting officer.

The contracting officer, by conference or in writing, informs the contractor of the authorities and responsibilities of those Government personnel (project officer, auditor, property administrator, cost advisor, etc.) with whom he will deal during the life of the contract.

1. Need to Delegate Functions: Since the contracting officer cannot do all the work himself, particularly on the more complex and costly procurements, he requires the assistance of a team made up of people of many skills and professions. Thus, when the contract is placed, a representative from the Program Office is usually designated as the Government Technical Representative (GTR) to furnish technical direction and monitor the contractor's performance. He is also referred to as the Contracting Officer's Technical Representative

(COTR) or as the Project Officer. A summary of the Project Officer's responsibilities are described on page21-15. This is necessary to anticipate potential problem areas, to provide information to the contracting officer, to determine progress toward completion, to determine whether the contractor is meeting his delivery schedule, and to require appropriate modifications to the contract. The contracting officer is responsible for contract administration and for compliance with all the terms of the contract including compliance with the statutory and regulatory provisions. It is essential in their respective monitoring functions that the GTR and the contracting officer work cooperatively and maintain close communication to assure the successful performance of the contract within the price, period of performance and other requirements and conditions of the contract.

2. NASA Policy to Use Other Agencies: NASA realizes that many of these skills already exist in agencies other than its own. Therefore, as stated in NASA PR 51.302, it is NASA policy to make optimum use of the contract administration and related support functions available from the Department of Defense and other Government agencies. Normally, although not always, the contract administation or supervision function is best accomplished at or near the contractor's plant where the work is being accomplished.

When NASA needs contract administration services from a Contract Administration Office (CAO) of one of the other Government agencies, the NASA contracting officer issues to the CAO a letter of delegation, using a standard format letter, NASA Form 1430, see page 21-16,prescribed by the NASA Director of

Procurement, in which the contract administration functions to be performed are explicitly stated. These letters of delegation are, of course, issued pursuant to existing NASA agreements with other Government agencies.

3. Delegable and Nondelegable Functions: NASA PR 51.304 lists the contract administration functions which may be delegated on an optional basis as well as those functions which are the responsibility of the NASA contracting officer, and hence, shall not be delegated to DOD or to another Government agency. When executing the NASA Form 1430, the contracting officer specifically authorizes the delegations appearing on the reverse side of the form. The contracting officer may also withhold delegations listed on NASA Form 1430A.

While the NASA contracting officer, like contracting officers everywhere in the Government, may delegate certain functions, he must, however, retain the power of decision and of final authority in managing contracts for which he is responsible.

Contract Modifications and Changes

1. Types of Contract Modifications: During the administration of NASA contracts, different types of modifications may be necessary to incorporate new requirements into the contract or to provide contractual coverage for situations that develop after contract award. Some of these modifications are made in accordance with provisions originally set forth in the contract; others are not anticipated by the original contract terms. All contract modifications must be made in writing by the contracting officer subsequent

to discussion with the technical officer. This policy insures that any revisions to contract terms are reduced to written agreements between the Government and the contractor. An understanding of the types of modifications that may be made to contracts and the correct method for making them can do much to alleviate the problem of informal commitments.

2. Modifications Made Pursuant to Contract clauses: A number of contract terms and provisions provide for modification to a contract if certain conditions arise or if information not known at the time of award becomes available. The standard "Changes" clause contained in Government contracts provides that the contracting officer may unilaterally direct the contractor to make certain changes in the work, to be followed by such equitable adjustments in the price and the delivery schedule as the changes make necessary. These changes must be within the general scope of work and cannot include effort which in the contracting officer's judgment constitutes new procurement.

3. Other Types of Modifications: In addition to modifications made pursuant to the terms and provisions of a contract, other modifications not expressly anticipated by the contract may be necessary. In the proper circumstances, for example, a contract may be amended to increase the quantity of services to be furnished in exchange for an equitable increase in the contract price. Or even if it is not expressly stated in a contract clause, a modification may provide that the Government will, in exchange for equitable consideration, furnish certain property that the contractor was originally supposed to supply or acquire himself. The authority to make these modifications

is restricted to situations in which the Government receives additional and adequate consideration in exchange for the agreement. Thus, in the first example cited, the Government pays a higher price but receives additional services; in the second, it releases the contractor from his obligation to supply certain components or other property and receives in exchange an appropriate reduction in the contract price.

4. Modifications Within the Scope of the Contract vs New Procurement: In discussing contract modifications, it is necessary to distinguish new procurement from other contractual actions such as changes, since new procurement must be treated just as is a new requirement. For example, the procurement of additional services is new procurement, whether or not there is an existing contract for the same service. Similarly, a change in the essential character of service under an existing contract, or additional work outside the overall scope of an existing contract, is also new procurement. The question of whether new specification requirements essentially change the character of existing supplies or services may be a difficult one to answer. While the consideration is basically a legal one, all scientific and technical personnel should be aware of the distinction between "new procurement" and "changes" to prevent misunderstandings as to the mechanisms involved in implementing each.

If a new procurement is involved and NASA decides to contract with a contractor who is already providing similar services under an existing contract, the new requirement may either be incorporated in an entirely new contract or

effected as an amendment to the existing one. The action taken will depend on other circumstances, such as time remaining on the existing contract, severability of the new work, and so forth. All rules governing new procurement will apply including the solicitation, evaluation, and negotiation process.

5. Negotiation of Changes and Equitable Adjustments: The contract clause entitled "Changes," together with the "Default," "Termination for Convenience," and the "Disputes" clauses, distinguishes Government contracts from other contracts by the control over performance vested in one of the contracting parties. Unlike other contracts where performance must conform to pre-agreed terms in the absence of modifications issued by both parties, the "Changes" clause in a Government contract allows the Government to alter the work to be performed without the consent of the contractor.

One of the more important requirements is that the "Change Order" must come within the general scope of the contract. Changes in work which go beyond the limits or scope of the contract are referred to as "cardinal changes" and constitute a breach of the contract.

A "constructive change" is one where the contracting officer, through his actions or directions, has changed the work within the general scope of the contract in any one of the areas set forth in the Changes provision, but has failed to issue a change order. The constructive change theorum often is used to allow administrative settlement of cases involving defective or impossible specifications and for acceleration of performance situations where

the contractor encountered excusable delays known to the Government but for which the Government refused to extend the performance time. Advice of counsel should be obtained on constructive changes.

The "Changes" clause requires the contractor to assert his claim within 30 days unless the Government extends this period. In any case, however, the claim must be asserted prior to final payment. The "equitable adjustment" provided for in the "Changes" clauses is for the purpose of keeping the contractor whole for any modification by the Government. The adjustment may be made in terms of contract price, delivery schedules, or both, and may be a decrease as well as an increase where the change by the Government reduces the cost of performance. The equitable adjustment to the contract price for extra work caused by a change includes a profit on such work as part of the cost of the work. The current Changes clauses provide that the equitable adjustment shall cover increases in cost to both the changed and unchanged work resulting from the change order. NASA PR 7.103-54 contains a clause on pricing of adjustments which shall be included in all formally advertised or negotiated contracts other than cost-type contracts.

When the Government and the contractor reach agreement on a change and the amount of the equitable adjustment, the change order and the adjustment are embodied in a supplemental agreement. When the Government issues a change order and the parties cannot reach an agreement on an equitable adjustment, the contracting officer should issue a unilateral decision fixing the adjustment.

CHAPTER 17

CONTRACT COST MANAGEMENT

The basic objectives of contract cost management is to insure the payment of a fair and reasonable price for what the Government buys and to achieve this through the application of procurement, financial and management techniques as appropriate to the contractual relationship.

Corporate Accounting Systems

There are two basic accounting philosophies - (i) the cash basis and (ii) the accrual basis. The cash basis of accounting simply records cash receipts and disbursements and measures income by the difference between the two. The accrual basis of accounting, on the other hand, attempts to match costs and expenses to the time period in which performance actually occurs on a project. The objective of the accrual basis of accounting is to obtain a measure of the results of operations by identifying to each calendar time period both the costs and the losses as well as the results of performance to provide a comparative evaluation. See Price/Cost Diagram on page 21-17.

Costs are of two basic types - direct and indirect. Direct costs are those which can be identified directly and immediately to a specific project or activity; e.g. factory labor, raw materials, purchased parts, fabrication, engineering effort, etc. Indirect costs are those which cannot be readily identified with a specific project or activity but which are applicable generally to a related productive or administrative activity; e.g. manufacturing overhead, selling expense, G&A expenses, advertising costs, home office expense, etc. It is important to identify these indirect costs to determine

a method of applying overhead to arrive at a total cost incident to the project or product and to provide a basis for judgment of the overhead rate.

A cost accounting system should produce reasonably accurate unit costs and provide control over costs whether they be direct or indirect costs. It should also provide cost data for use in estimating and pricing, for measurement purposes and for the guidance of management.

The Cost Accounting Standards Board (P.L. 91-379, approved Aug. 15, 1970) is responsible for establishing uniform cost accounting standards to provide a greater degree of uniformity and consistency in cost accounting as a basis for negotiating and administering procurement contracts. These standards are to be used by relevent Federal agencies, including NASA, and defense contractors and subcontractors in estimating, accumulating, and reporting costs on all negotiated prime and subcontract defense procurement in excess of $100,000.

Cost Overruns

The cost-type contract requires careful technical surveillance and auditing of costs, and imposes a heavy administrative burden on both the Government and the contractor. A cost overrun occurs in a cost-reimbursement type contract when the contractor exceeds the estimated cost or fund limitation of the contract. This may occur due to:

1. Technical problems because of uncertainty in the state-of-the-art.
2. Poor estimating or "buying-in" practices.
3. Poor management of the contract.
4. NASA's own error; e.g. unofficial requests upon contractor to do something that will cost more money without a Change Order.

The Government is not usually legally responsible for reimbursing a contractor for costs incurred in excess of the total estimated cost set forth in the contract. The contractor is not obligated to incur costs beyond the estimated

cost specified in the contract or to continue performance under the contract unless and until he is authorized to do so by a contract modification. Since formal action by the contracting officer is the only allowable method of increasing the funds under the contract, it is the responsibility of scientific and technical personnel not to take any action that would lead contractors to incur costs beyond the amount specified in the contract. The Project Manager, who is in constant contact with the technical, schedular and financial aspects of the effort, is the NASA representative in the best position to detect potential overruns.

On many occasions scientists, engineers, and other technical personnel can unintentionally escalate costs in the performance of a contract by:

1. Excessive changes.
2. Overspecification.
3. Sole source procurement.
4. Unnecessary crash programs.
5. Overdocumentation requirements.
6. Delay in providing Government-furnished property.

Four Actions that may be taken under these circumstances are:

1. Increased funding (with Director's approval).
2. Termination for convenience.
3. Allow the contract to expire.
4. Modify the Statement of Work.

The contractor who consistently overruns, or perhaps underruns, his costs, because of poor planning or performance, is not too good a bet for future contracts.

Contractor Financial Management Reports

Effective contract management depends upon receiving descriptive cost information and establishing accounting systems that are capable of generating such cost information. The NASA Form 533 series of reports is designed for con-

tractors to use in submitting, at required intervals, their financial and manpower experience and projections. Through these reports, NASA management is provided with data necessary for:

1. Assuring that dollar and labor resources realistically support the schedule.

2. Evaluating contractor cost performance.

3. Planning, monitoring and controlling funds and manpower.

4. Establishing the basis for the agency's accrued revenue and expenditure accounting system.

These forms are applicable to all NASA cost-type contracts, price redetermination, and fixed-price incentive contracts in excess of $100,000. They may be used optionally, if so required, for contracts under this amount.

CHAPTER 18

TERMINATION OF CONTRACTS

In most contracts, provisions are included which permit termination action to be taken in cases of default or in cases involving termination for the convenience of the Government. NASA PR Part 8 covers procedures for termination of contracts. It is the responsibility of a contracting officer, even though he may have delegated certain functions to the technical officer and to others, to insure compliance with any contract which he awards. The fulfillment of this responsibility requires that he be alert at all times in order to recognize situations which may lead to action necessitating the termination of a contract. However, in spite of his best efforts, an occasional situation will develop which requires that he initiate action leading to the termination of a contract. The implementation of the proper policies and procedures in such action is a necessary function of contract administration. The process of executing contract termination can become somewhat involved, nontheless, the contractual provisions authorize the contracting officer to terminate a contract.

Termination for Default

Termination for default generally consists of the exercise of a contractual right by the Government to terminate a contract, in whole or in part, because of a contractor's failure to perform his obligations under the contract.

It is NASA policy to use default termination procedures when a contractor,

without excusable cause, fails to comply with the terms and conditions of a contract. This course of action is used when, as a result of such failure, the contractor cannot deliver the supplies or perform the services called for under the contract in the manner and within the time specified in the contract. However, it is not Government policy to use default termination as a punitive measure. Instead, it should be used to insure the contractor's adherence to his obligations and to protect the Government from any loss which might be sustained as a result of the contractor's failure to comply with his contract obligations.

Reasons for Termination

Normally, there are three general reasons for the termination of a contract because of the default of the contractor. Under contracts containing the appropriate "Default" clause, the Government has the right, subject to the notice requirements of the clause, to terminate the whole or any part of the contract for default if the contractor (1) fails to make delivery of the supplies or to perform the services within the time specified in the contract, (2) fails to perform any other provisions of the contract, or (3) fails to make sufficient progress, thereby endangering the performance of the entire contract. An act of insolvency may also be cause for default termination.

Effect of Termination for Default

Under termination for default, the Government is not liable for contractor's expenditures on undelivered work. The Government is therefore entitled to repayment of any advance payments and of any progress payments which are

applicable to such work. Even so, the Government, at its own discretion, may elect to take all or any part of the completed supplies and manufacturing materials. In such cases, the contractor shall be paid the contract price for all supplies accepted by the Government.

Construction contracts usually include a clause which permits the Government to take over and complete, or cause to be completed, the work which remains to be performed if the contract is terminated for default. If after assuming responsiblity for performance of the remaining portion of the contract, the Government is unable to accomplish the performance within the period of time specified in the contract, the contractor will be liable for damages. Even though a contractor is in default, however, the contracting officer may permit him to continue work under the contract, provided he considers such action to be in the best interest of the Government.

Procedure for Default

The "Default" clause which is included in most NASA contracts empowers the contracting officer to present a "cure" letter to a contractor if he is not complying with the provisions of the contract. If the contractor fails to correct the specified defect within the period of time authorized in the "cure" letter, the contracting officer may immediately notify the contractor by means of a "show cause" letter of the possibility of termination of the contract for reasons of default.

Upon receipt of the contractor's reply, or if no reply is received at the

expiration of the period for reply to the "show cause" letter (or the "cure" letter if no "show cause" letter is issued), the contracting officer must decide whether or not to terminate for default.

In arriving at a decision to terminate for default, consideration must be given to the current status of the contract in question. Waiver or abondonment of a delivery schedule must be avoided. In the event it is decided that extension of the delivery schedule is necessary, the contracting officer should issue a supplemental agreement to include the change. While consideration must normally be obtained for the extension of any delivery schedule necessitated by the fault of the contractor, such consideration is not necessarily limited to monetary recoupment. If justified, the consideration may be nominal. In any event the contracting officer will seldom be justified in permitting a contract to become delinquent and to remain so for longer than 30 days without taking action which leads to default termination or to an extension of the delivery schedule for a consideration.

In the event a decision is made to permit the contractor to continue performance, the contracting officer should prepare the supplemental agreement extending the delivery schedule, provided the present schedule is about to expire or has already expired. If the contract delivery schedule has not expired and the delinquent contractor has made a satisfactory reply to the "cure" notice, the contracting officer may notify him that the Government is withholding default action in order to allow completion of the contract.

When a decision is made to terminate for default, with the coordination of the project officer and the legal office, the contracting officer should immediately prepare a statement justifying his action.

Appeal Rights of the Contractor

The "Disputes" clause in NASA contracts permits defaulted contractors to file appeals for either of the following reasons: (1) default termination of the contract, or (2) assessment of excess costs, if any. Appeals should be addressed to the NASA Administrator by way of the contracting officer. Appeals are usually heard (at Washington, D.C.) by the NASA Board of Contract Appeals, the duly appointed representative of the Administrator.

Termination for Convenience

NASA General Provisions, Forms 246, 247, 417, and 418 contain a clause "Termination for Convenience of the Government." Such clauses grant to the Government the right to terminate the contract at any time it determines that such action will be in the best interest of the Government. This clause is applicable in cases where the requirement for an item no longer exists, and in cases which are caused by a change in the regulations or by the adoption of a new type of item. The clause may also be invoked to terminate a portion of a contract. The only prerequisite which must be met prior to the invocation of this clause is a determination that such action is in the best interest of theGovernment.

If the contracting officer should decide to terminate a contract for the con-

venience of the Government, he must give the contractor written notification of the termination. The notice of termination should state clearly what is being terminated and the effective date of the termination. The notification to the contractor should include any instructions which will expedite the processing of the terminated portion of the contract.

Upon receipt of a notice of termination, the contractor must stop work, as specified, and he must order no more materials for the portion of the work which is affected. Any outstanding subcontracts or orders against the terminated portion of the contract should be terminated and settled after review by the contracting officer. In all such cases no further costs should be incurred in connection with the portion of the contract which has been terminated. In addition, the contracting officer should give the contractor instructions relative to the disposition of property or items which were procured under the contract. Termination for convenience clauses provide that the contractor should submit a termination claim to the contracting officer. The claim should be submitted promptly after receipt of notification of termination.

Termination Settlement Procedures

The settlement of terminated contracts may be effected by the following:

1. Negotiated agreement.
2. Determination by the contracting officer
3. Costing-out under vouchers under cost type contracts.
4. A combination of these methods.

Negotiation is the preferred method of settling termination claims; it should be used to the maximum possible extent. However, there are exceptional cases in which it is not possible to settle all elements of a termination claim by negotiation. In these instances the contracting officer should try to negotiate a settlement with the contractor on those elements of the termination claim on which agreement can be reached.

A written determination or finding should be made concerning all elements of a contract termination claim on which no agreement can be reached with the contractor. This will normally be the responsibility of the contracting officer. Sometimes the contractor files an appeal or indicates that an appeal will be taken from the contracting officer's decision. In either case, the settlement agreement should incorporate, in addition to its other provisions, appropriate reservations with respect to the rights of the parties under the determination. This reservation should also be included in the settlement agreement if any part of the amount due the contractor has not been paid when the agreement is to be executed.

NASA PR 8.201(d) provides that heads of installations shall appoint a Termination Contracting Officer (TCO) to perform specific duties relating to contract termination as his primary function. Such duties should include: (i) receiving and reviewing the Termination Authority (NASA Form 1412); (ii) reviewing the contract and other related documents prior to issuing the Notice of Termination; (iii) issuing notices of termination, reinstatement, and recission to contractors; (iv) assigning termination docket control

numbers; (v) developing, maintaining, and managing basic controls relating to contract termination and settlement actions; and (vi) carrying out the duties, functions, and responsibilities set forth in NASA PR Part 8. See illustrations on pages 21-18 and 21-19.

Final Payment and Closeout of Contract

Good planning can do much to smooth the progress of the closing of a contract. First, realistic schedules should be established for final reports. It is not usually possible for a contractor to compile or submit a final technical report until after he completes the work; final financial reports might not be available for 30 to 60 days or more. Second, a realistic schedule must be established for accounting for the disposition of Government property, if furnished. Third, contractors must be reminded that there is always a time lag between the time they submit a statement for final payment and the time they are reimbursed.

A contract is physically complete when all the services or articles it calls for, including such items as reports, spare parts, and exhibits, have been delivered and accepted. The contract is not administratively complete, however, until all actions taken in compliance with the contract and with regulations have been properly documented and final payment has been made.

The GTR should be aware that certain checks are necessary in closing out every contract. First, completion of delivery must be verified. Next, the contract file must be checked to see that it contains properly completed documents, since it must contain sufficient documentation to allow ready reconstruction of all stages of the procurement.

If Government property was furnished, the contractor must submit an inventory of such property at the completion of the contract or upon request of the contracting officer. A verification should be made regarding the condition of the Government property. The contracting officer must make known the existence of residual Government property so that proper disposal can take place.

CHAPTER 19

CONTRACTING WITH SMALL BUSINESS

SBA Responsibilities

The Small Business Administration (SBA) is organized under the general direction and supervision of the President - not affiliated with or contained in any other Government Agency or Department. It has broad responsibilities and important powers, especially since the enactment of P.L. 95-89, August 4, 1977 which amended the Small Business Act. These powers include:

1. Power to certify the competency of any small business concern with respect to all elements of responsibility, including but not limited to capability, competency, capacity, credit, integrity, perserverance, and tenacity.

2. Power to recommend, within a reasonable time, appropriate small businesses to be included in the source list for any procurement suitable for such concerns.

3. Through its representative (and in conjunction with the small business specialist in the procuring activity) power to screen procurement requests in order to advise on their suitability for small business performance.

4. Authority to determine that a particular organization is a small business concern for the purpose of Government procurement.

5. Power to make loans to small business concerns

6. Power to certify that the SBA is competent to perform any specific prime contract, to negotiate the prime contract with the appropriate procuring authority, and to subcontract this work to small business concerns.

NASA Responsibilities

NASA PR 1.704 sets forth policies and procedures governing NASA small business officials. The NASA Director of Procurement is responsible for the general supervision and coordination of the NASA Small Buisness Program. Within the Office of Procurement, the Small Business Advisor is responsible for developing the NASA Small Business Program, advising the NASA Director of Procurement and other officials on Small Business problems and representing NASA before other Government Agencies on matters affecting Small Businesses. A Small Business Specialist is designated by the Director of each NASA Field Installation having a procurement responsibility. Because his function is to review and advise, he is not subject to the direction of contracting or technical personnel. His responsibilities are:

1. To locate capable small business sources.

2. To provide procurement advice to small business concerns.

3. To protect the interests of small business concerns in all procurement activities in which the appropriate agency is involved.

4. To review new procurements (over $2,500) for potential participation by small business concerns. As part of this review, he makes set-aside recommendations or determinations with the cognizant contracting officer.

5. To review current procurement programs for the possible breakout of suitable items for small business participation.

6. To participate in determinations of the responsibility of prospective small business contractors.

7. To evaluate prime contractor's small business sub-contracting programs.

8. To provide liaison with SBA and other small business officials within NASA.

Set-Aside Program

Among the provisions of the Small Business Act is a requirement that -- under certain circumstances -- small businesses must be given preferential treatment in solicitation for Government procurements and subsequent award. Specifically, the Act provides for such treatment when it is determined to be in the interest of:

1. Maintaining or mobilizing the nation's full productive capacity.
2. Facilitating the war or national defense programs.
3. Assuring that a fair proportion of Government procurement is placed with small business concerns.

Decisions to set aside procurements for exclusive small business participation are made by the contracting officer and the small business specialist.

Class set-asides apply to current or future procurements, or portions of them. They may be for selected items or services, or groups of items or services. It is not necessary to base the set-aside determination on a current procurement if future procurements can be clearly forseen. Class set-asides apply only to the purchasing activity making the determination. They do not apply to an individual procurement for which small purchase procedures are to be used. A class set-aside agreement must specifically identify the items or services it covers. It is subject to annual joint review by the contracting officer and the small business specialist.

In a total set-aside the entire procurement is restricted to small business

concerns. Bids or proposals from large businesses are rejected as nonresponsive. Total set-asides are used only when there is reason to expect that bids or proposals will be obtained from a sufficient number of small business concerns so that reasonable prices can be obtained. All total set-asides must be preceded by a determination that such a reasonable expectation exists. Total set-aside awards may be accomplished through conventional negotiation. Or they may be effected through Small Business Restricted Advertising -- formal advertising that is restricted to small business solicitation and consideration for award. A notice of set-aside is required in each solicitation document.

If an individual procurement (or a class of procurements) is not considered appropriate for total set-aside, a partial set-aside should be considered if both of the following conditions exist:

1. The procurement can be broken down into two or more economic production runs or reasonable lots.

2. One or more small business concerns may be expected to have the technical competence and productive capacity to furnish that portion of the requirements at a reasonable price.

A partial set-aside cannot be made if only two concerns (one small and one large) with the required technical competency and productive capacity are expected to respond to the solicitation.

In procurement that involves a partial set-aside, the quantity required is divided into a set-aside portion (for exclusive small business participation)

and a non-set-aside portion (for large or small business consideration). Both parts must not be less than an economic production run or reasonable lot. After the entire non-set-aside portion has been awarded (by means of conventional procurement procedures), the set-aside portion is negotiated with eligible responsible small business concerns. (Eligibility here means that the small business submitted a responsive bid on the non-set-aside portion). Negotiations are restricted to quantity determinations, since the awarded unit price on the set-aside portion is automatically determined by the unit price awarded on the non-set-aside portion. Price differentials may not be paid in partial set-asides.

In carrying out labor surplus areas and small business set-aside programs, contracts are awarded in the following order of priority:

1. Concerns which are located in labor surplus areas, and which are also small business concerns, on the basis of a total set-aside.

2. Concerns which are small business concerns on the basis of a total set-aside.

3. Concerns which are small business concerns, on the basis of a partial set-aside.

4. Concerns which are located in labor surplus areas on the basis of a total set-aside.

Labor Surplus Areas

Pursuant to the authority of the Defense Production Act of 1950, 50 U.S.C. App. 2061, the Office of Emergency Planning has issued a policy statement encouraging placement of contracts or performance of contracts in areas

of unemployment or underemployment. While the Department of Labor is responsible for determining the areas to be favored, the procurement agencies have the responsibility for administering the policy by means of contract clauses. The embodiment of this program has taken a form similar to small business set-asides. It should be noted that P.L.95-89 which amended the Small Business Act, does not prohibit partial labor surplus area set-asides. Also, regarding total labor surplus area set-asides, it should be noted that such set-asides are now permissible.

Labor Surplus Area Subcontracting

The Government also encourages subcontracting with firms that will perform most of the work in areas of persistent or substantial labor surplus. This only applies, however, if (i) efficient performance of the subcontracts is maintained and (ii) prices are no higher than elsewhere. The Utilization of Concerns in Labor Surplus Areas clause NASA PR 1.805-3(a) is included in most Government prime contracts over $5,000. It requires the prime to use his best efforts to implement the Government's labor surplus area policy in awarding subcontracts.

The Labor Surplus Area Subcontracting Progam clause NASA PR 1.805-3(b) is included in prime contracts in excess of $500,000 that offer subcontracting opportunities. It requires the prime contractor to set up and maintain a labor surplus area subcontracting program, according to its terms. The clause lists orders of preference for labor surplus area concerns. It requires inclusion of the Utilization of Concerns in Labor Surplus Area clause in subcontracts that offer substantial opportunity

for further implementation. The purpose of this requirement is to implement labor surplus programs at lower-tier subcontract levels. The responsibility of the procuring activity and field personnel are essentially the same as under the Small Business Program.

Certificate of Competency

The Small Business Act as amended by P.L.95-89 grants SBA statutory authority to certify the competency of any small business concern with respect to all elements of responsibility.

Heretofore, this authority was limited only to capacity and credit. "Credit" means the adequacy of the bidder's financial resources. "Capacity" refers to the firm's overall ability to meet the quality, quantity, and delivery requirements of the proposed contract. It includes ability to perform, organization, experience, technical knowledge, skills, "know-how", technical equipment, and facilities.

By modification of the Act, SBA now has the authority to certify, in addition to "capacity" and "credit", all elements including competency, integrity, perseverance, and tenacity.

A certificate of competency relates only to the specific procurement action under consideration. If the contracting officer determines that an otherwise acceptable small business bidder is not responsible because of any of the foregoing elements, the matter must be referred to the SBA for a competency determination. Meanwhile, award must be suspended until

receipt of the certificate of competency or its refusal, or the expiration of fifteen working days, whichever is earlier. Normally, the contracting officer accepts the SBA certificate of competency as conclusive, and award is made accordingly. However, if serious doubts about the contractor's ability to perform persist, the award may again be postponed and the matter forwarded to higher departmental authority for further referral to SBA. The SBA's final decision must then be considered conclusive.

There are certain exceptions to the use of the certificate of competency procedure. It is not mandatory when any of the following conditions exist:

1. The award must be made without delay, and justification of urgency is documented.

2. The proposed award does not exceed $2,500. (Use of the procedure is discretionary between $2,500 and $10,000).

3. The source selection process is based on highest technical competence or best scientific approach (such as procurements for research and development, highly complex equipment, or personal or professional services).

It should be noted that the SBA may not have jurisdiction over questions of the acceptability (or unacceptability) of technical proposals from small business concerns. However, if the small business concern has been selected as most technically competent, but is determined not responsible for other reasons, then the certificate of competency procedure may apply.

CHAPTER 20

STANDARDS OF CONDUCT

The principles, purposes, and regulations pertaining to standards of conduct for NASA employees are set forth in NHB 1900.1. The fundamental philosophy behind these regulations can be stated quite simply -- NASA purchasing agents and other persons who are engaged in dealing with industry (whether such industry is involved in scientific endeavors or furnishing hardware or services) occupy positions of trust and responsibility. This includes all persons who participate or have responsibility for the determination of requirements, award of contracts, and contract administration. It is essential that these people maintain the highest standards of personal contact with business firms and individuals and make certain that their relations are above reproach in every respect. Such NASA personnel must avoid any conflict of interest or presumption of conflict of interest between their Government responsibilities and personal lives and actions.

In short, both law and regulation provide that "a Federal employee shall not accept anything of value for or because of any official act he has performed or will perform,"etc.

While NHB 1900.1 fully outlines prohibitions concerning gifts, gratuities, and conflicts of interest, the following indicates situations that must be avoided (whether or not they are specifically prohibited) which might result in or create the appearance of conflict of interest:

1. Using public office for private gain.

2. Giving preferential treatment to any organization or person.
3. Losing the ability to be impartial by acceptance of gifts or gratuities.
4. Making an official decision outside official channels.

CHAPTER 21

LECTURE MATERIAL

THE PROCUREMENT CYCLE

SHOWING
PRIME AND SECONDARY RESPONSIBILITIES*
FOR ACCOMPLISHMENT

PRESOLICITATION PHASE

REQUIREMENT

Prime: Man with need: Project Officer, Technical Officer, Requirements, etc.

Secondary:

Input: A procurement need.

PROCUREMENT REQUEST

Prime: Man with need

Secondary:
1. Approving authority
2. Requirements review
3. Specifications writer (usually Technical)
4. Security
5. Auditor

Inputs:
1. Schedule/Statement of work.
2. Specifications.
3. Drawings.
4. Delivery dates.
5. Special conditions.
6. Any necessary approvals from higher authority.
7. Security.
8. Cost Estimates (in-house)

FUNDING

Prime: Budget and Fiscal Officer

Secondary: Man with need

Inputs:
1. Certification of availability of funds.
2. Commitment of funds.

* "PRIME" = Man with main responsibility for successful completion of each step, including obtaining necessary inputs from those who have secondary responsibility.

SOLICITATION-AWARD PHASE

SOLICITATION DOCUMENT

FORMAL ADVERTISING (IFB)

Prime: Contracting Officer

Secondary:
1. Man with need
2. Legal
3. Cost and Price analysts
4. Technical advisors to CO
5. Security

Inputs
1. Review PR; e.g.:
   a. Specifications are clear and not contradictory or restrictive.
   b. Delivery schedule realistic.
   c. Familiarize self with technical details.
2. Determine that conditions for Formal Advertising are present:
   a. Definite specifications.
   b. Adequate number of suppliers.
   c. Adequate time.
3. Prepare IFB, including:
   a. Control and administrative information.
   b. Specifications or information on where to obtain.
   c. Any special bidding conditions; e.g., alternate bids, small business, price escalation, special qualifications.
4. Assemble solicitation list. Maximize full and free competition.
5. Synopsize if required.
6. Insure that amendments and extra information furnished to all invitees.

NEGOTIATION (RFP)

Prime: Contracting Officer

Secondary:
1. Man with need
2. Legal
3. Cost and price analysts
4. Security

Inputs:
1. Review PR (as in Formal Advertising).
2. Justify negotiation under 10 USC 2304(a).
3. Obtain necessary approvals, including D&F (if required).
4. Prepare source list and coordinate it with requiring personnel as necessary.
5. Determine pricing arrangement on tentative basis: cost-reimbursement or fixed-price.
6. Determine patents, data and copyright arrangements.
7. Determine what GFP is required and its availability.
8. Determine requirements for cost information from proposers.
9. Synopsize as required.
10. Obtain legal & technical approvals as required.
11. Distribute RFP.
12. Insure that amendments and extra information furnished to all invitees.

It should be recognized that final responsibility for the legality and acceptability of the solicitation process rests with the Contracting Officer.

EVALUATION

FORMAL ADVERTISING

Prime: Contracting Officer

Secondary:
1. Man with need
2. Legal
3. Cost and price analysts
4. Security

Inputs:
1. Open and read bids at time appointed.
2. Prepare abstract.
3. Arrange for examination of bids and abstract, if requested.
4. Determine responsibility for lateness of any bids or modifications.
5. Note possible mistake in bids and follow correct procedure.
6. Determine responsiveness of bids.
7. Determine low bid.
8. Determine low bidder's responsibility.
9. Receive and resolve any protests.
10. Security Data.

NEGOTIATION

Prime: Contracting Officer

Secondary: Members of negotiating team

Inputs:
1. Review offers:
   a. All questions are answered.
   b. Price breakdowns are included as required.
   c. Arithmetic is correct.
   d. Award deadline is specified.
   e. All amendments accepted.
   f. Refer offeror's exceptions to appropriate official for decision.
2. Obtain technical evaluation of offers.
3. Obtain cost, price and profit analysis as required.
4. Business evaluation.
5. Select offerors to negotiate with.
6. Determine responsibility of offerors selected for negotiation.
7. Security Data.
8. Make presentation to selecting official(s).
9. Select offeror for proposed award.

AWARD

Prime: Contracting Officer

Secondary:
1. Approving authorities
2. Budget and Fiscal office

Inputs:
1. Obtain necessary clearances.
2. Execute the award/contract.
3. Notify unsuccessful bidders/offerors.
4. Publicize award in Commerce Business *Daily* if required.
5. Obligate funds.

Inputs:
Prenegotiation
Obtain information on offeror, particularly:
a. Department and personnel who will perform the contract.
b. Names of officers, representatives and negotiators.
c. Location where work will be performed.
d. Availability of personnel who will perform the work.
e. Need for any Government financing.
f. Review offeror's make-or-buy program; purchasing and accounting systems.
g. Evaluate need for GFP.

Negotiation
Use appropriate techniques to
a. Evaluate offeror's position and estimates.
b. Set forth Government's position.
c. Explore alternatives in case of disagreement.
d. Make sure that all important issues are resolved and understood by both parties.

POST-AWARD ADMINISTRATION PHASE

CONTRACT ADMINISTRATION

Prime: Contracting Officer

Secondary:
1. Project Officer
2. *(Quality Control)*

Inputs:
1. Obtain progress information as required:
   a. Production schedule.
   b. Monthly production progress reports.
   c. Material inspection and receiving reports.
   d. Progress reports.
   e. Financial Management report.
   f. Cost incurred on contract report.
   g. PERT, GANTT, Line of Balance, etc.
   h. Labor-management information.
2. Avoid informal commitments to contractor.
3. Follow appropriate procedures for changes and contract modifications.

TERMINATION

Prime: Contracting Officer (Termination Contracting Officer (TCO))

Secondary:
1. Man with need
2. Legal Counsel
3. Cost/price analysts
4. Plant Clearance Officer

CONVENIENCE

Inputs:
1. Obtain necessary approvals.
2. Assess effect on
   a. Budget and funds.
   b. Subsidiary and related requirements.
   c. Requirements of other activities.
3. Notify contractor, avoiding advance leaks.
4. Screen termination inventory.
5. Negotiate settlement.
6. Make equitable adjustment for continued portion of contract, if any.

DEFAULT

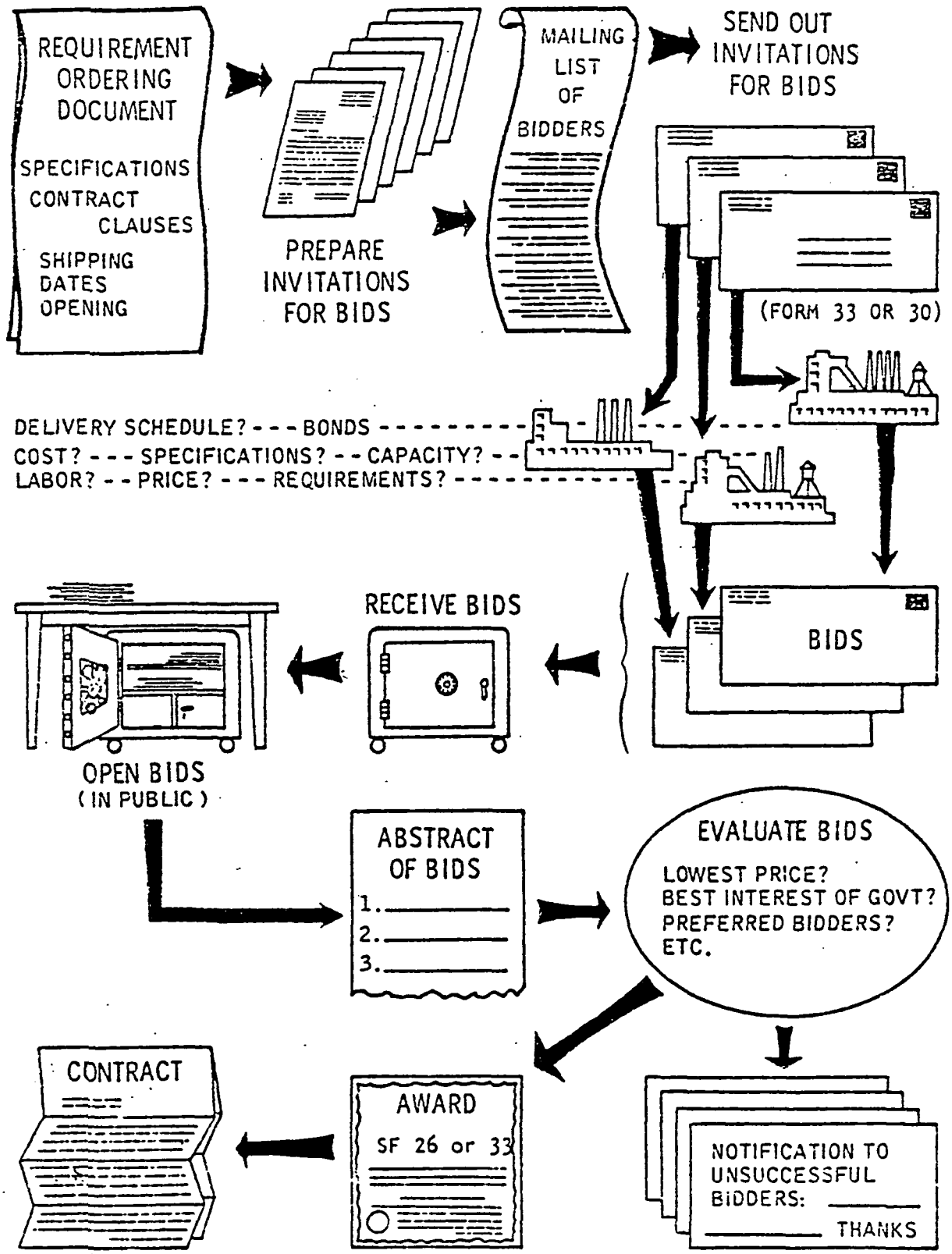
1. Determine if grounds exist for default.
2. Obtain necessary approvals.
3. Notify contractor.
4. Prepare for appeal under Disputes clause.

COMPLETION

Prime: Contracting Officer

Secondary:
1. Inspection/Receiving
2. Man with need (Project Officer)

Inputs:
1. Acceptance.
2. Payment.



PROCUREMENT BY FORMAL ADVERTISING

CIRCUMSTANCES PERMITTING NEGOTIATION

Title 10, U.S. Code 2304(a) Section: NASA PR	Circumstances	Remarks
2304(a) (1) 3.201	National emergency	(a) Determined in public interest during national emergency declared by President or Congress. (b) Determined necessary as to labor surplus areas and small business.
2304(a) (2) 3.202	Public exigency	Determinations and Findings by the Contracting Officer.
2304(a) (3) 3.203	Purchases not in excess of $10,000	Use is mandatory. Purchases are not to be broken down in order to use this authority.
2304(a) (4) 3.204	Personal or professional services	All of following must be satisfied: (1) if personal, must be performed by individual Contractor in person (not by a concern); if professional services, they may be performed by an individual Contractor in person or a concern; (2) are professional or are to be performed under Government supervision and paid for on time basis; and (3) procurement of services is authorized by law.
It is NASA policy to obtain personal services of experts and consultants by appointment rather than by contract as set forth in NASA Federal Personnel Manual.		
2304(a) (5) 3.205	Services of educational institutions	If "for any service to be rendered by any university, college, or other educational institution."
2304(a) (6) 3.206	Purchases outside the United States	If the supplies or services are to be procured and used outside the limits of the United States and its possessions.

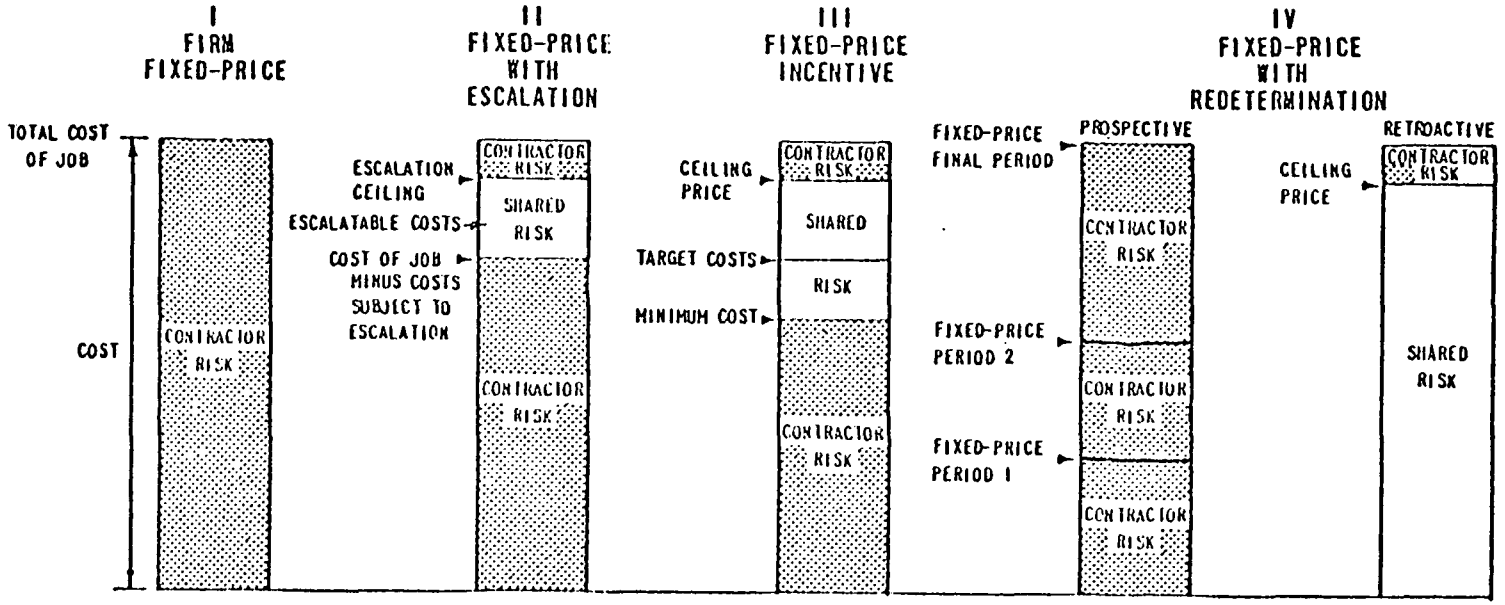
Title 10, U.S. Code 2304(a) Section: NASA PR	Circumstances	Remarks
2304(a) (7) 3.207	Medicines or medical supplies	Requires Determination and Finding by Contracting Officer. Special publicity required.
2304(a) (8) 3.208	Property purchased for authorized resale	Not used or needed by NASA
	(R E S E R V E D)	
2304(a) (9) 3.209	Perishable or nonperishable subsistence supplies	May be used for any and all types of subsistence supplies.
2304(a) (10) 3.210	Impracticable to secure competition by formal advertising	Determination and Finding by Contracting Officer. Examples cited in PR 3.210-2. Not to be used when other negotiation authority may be used.
2304(a) (11) 3.211	Experimental, developmental, or research work	Requires Determination and Finding by Contracting Officer if contract not more than $100K. If over, by the Administrator or Deputy Administrator.
2304(a) (12) 3.212	Classified Purchases	Used when the Administrator determines that the ...purchase or contract should not be publicly disclosed. Determination and Finding by the Adm. or Deputy Adm.

Title 10, U.S. Code 2304(a) Section: NASA PR	Circumstances	Remarks
2304(a) (13) 3.213	Technical equipment requiring standardization and interchangeability of parts	Used for equipment which the Adm. determines to be technical ... and that procurement by negotiation is necessary to assure standardization and interchangeability. Determination and Finding by the Adm. or Deputy Adm.
2304(a) (14) 3.214	Technical or specialized supplies requiring substantial initial investment or extended period of preparation for manufacture.	Administrator must determine that procurement by formal advertising (i) may require duplication of investment or preparation already made; or (ii) will unduly delay procurement. D&F by Adm. or Deputy Adm.
2304(a) (15) 3.215	Negotiation after advertising	Determination and Finding by the Adm. or the Deputy Adm.
2304(a) (16) 3.216	Purchases in the interest of national defense or industrial mobilization	D&F by the Adm. or Deputy Adm.
2304(a) (17) 3.217	Otherwise authorized by law	Law so authorizing must be cited in the purchase instrument. (e.g. P.L. 85-536 Small Business Act - for joint determination)

CONTRACT TYPES

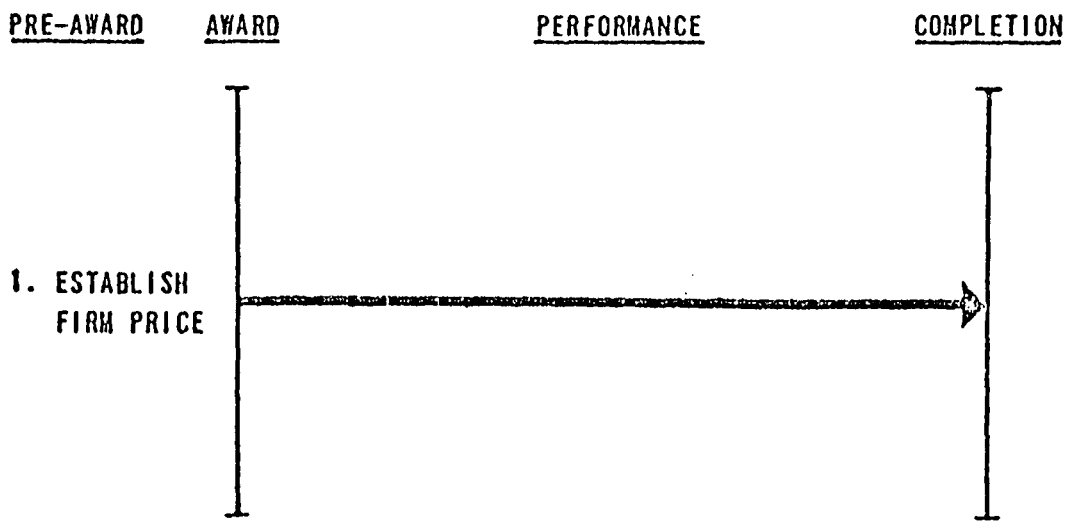
	FIXED-PRICE (*Greatest Risk on Contractor*)				COST REIMBURSEMENT (*Greatest Risk on Government*)				OTHER CONTRACTUAL DEVICES (*Special Uses*)		
	FIRM FIXED-PRICE	FIXED-PRICE WITH ESCALATION	FIXED-PRICE INCENTIVE	FIXED-PRICE WITH REDETERMINATION	COST AND COST-SHARING	COST-PLUS-INCENTIVE FEE	COST-PLUS-AWARD FEE	COST-PLUS-FIXED-FEE	TIME AND MATERIAL (LABOR-HOUR)	LETTER CONTRACT	INDEFINITE DELIVERY
APPLICABILITY	Fair, reasonable price can be established at inception: e.g., -Reasonably definite design or performance specifications -Realistic estimates -Adequate competition -Valid cost or pricing data giving reasonable price comparisons	-Market or labor conditions unstable over extended production period	Where cost uncertainties exist and there is the possibility of cost reduction by giving Contractor (i) a degree of cost responsibility and (ii) a positive profit incentive Firm Target Type; firm target and final profit adjustment formula can be negotiated initially Successive Target Type: initial target can be negotiated, but firm final targets *cannot*; sufficient information will be available early enough in performance to set final goals	Stated Time or Times quantity production-realistic price can be negotiated initially but *not* for later periods of performance Retroactive after Completion: realistic fixed price cannot be negotiated initially; amount so small or time so short any other contract type impracticable	UNCERTAINTIES IN PERFORMANCE - IMPOSSIBLE TO FIRMLY ESTIMATE COSTS Cost: R&D with non-profit organizations or educational institutions; facilities contracts Cost Sharing: R&D Projects jointly sponsored by Government and Contractor where he anticipates commercial benefit in lieu of contract fee	Development and test when incentive formula can provide positive incentive for effective management. Where feasible, use performance incentives together with cost and schedule incentives	(i)Level of effort for performance of services where mission feasibility is established, but measurement of performance must be by subjective evaluation; (ii) work which would have been placed under another type of contract if performance objectives could be expressed in advance by definite milestones or targets susceptible of measuring actual performance	Term Form: research, preliminary exploration, or study when level of effort is initially unknown (or development and test when a CPIF is impractical) Completion Form: R&D when the task or job can be clearly defined, a definite goal or target expressed, and a specific end product required	Not possible initially to estimate extent or deviation of work (L-H used where material not involved), e.g., engineering or design services; repair, maintenance, or overhaul	Urgency requires immediate binding agreement so work can begin but time does not permit negotiation of a definitive contract	Exact time of delivery unknown Definite quantity: quantity known; delivery period can be specified; supplies available or have a short lead time Requirements: precise needs of designated activities dur- a definite period not known initially Indefinite Quantity: impossible to know exact quantity needed by designated activities during a definite period and Government cannot commit itself beyond minimum
ESSENTIAL ELEMENTS	Initial fixed-price places 100% *responsibility* and *risk* on Contractor Government and Contractor must agree on fixed price at inception	NASA PR Clause -Established price NASA PR 7.106 -Labor/Material: NASA PR 7.107 -ceiling on upward adjustment; downward adjustment appropriate where elements escalated may fall below base levels provided in contract Contingencies are industry-wide and beyond Contractor control; contingencies must be defined in contract	Firm Target: target cost; target profit; price ceiling; profit adjustment formula Successive Targets: initial target cost and profit Price ceiling; firm target profit formula; and production point for application to get either a firm target and final profit formula or a fixed-price contract	Stated Time or Times fixed-price initially Prospective redetermination upward or downward; specific time or times for redetermination; price ceiling if appropriate Retroactive after completion: ceiling price; agreement to negotiate price after performance	Cost: Government pays all costs but *no* fee Cost-Sharing: Government pays agreed predetermined portion of NASA XV costs; no fee	Target cost; target fee; minimum and maximum fee; fee adjustment formula (applied at end of performance)	Negotiated estimate of cost; a base fee; maximum fee; the criteria against which performance is evaluated; resulting in an award fee	Negotiated estimate of costs; fee fixed initially except for changes in the work or services required	Direct labor hours specified at fixed hourly rates; direct materials at 'cost' as defined by NASA PR. Ceiling price shall be established	Maximum Government liability; include as many definitive contract provisions as possible; other provisions required by NASA PR 3.408 d); price ceiling if applicable	Definite Quantity: provision for delivery to designated points or on order Requirements: estimated total quantity; maximum and minimum total quantity when feasible; maximum and minimum order when appropriate Indefinite Quantity: stated maximum and minimum total quantity; maximum and minimum order when applicable
LIMITATIONS	ADEQUATE CONTRACTOR ACCOUNTING SYSTEM REQUIRED				ADEQUATE CONTRACTOR ACCOUNTING SYSTEM REQUIRED Cost-Sharing: must present evidence that there is high probability Contractor will receive substantial present or future commercial benefits	Statutory Fee Limitations Production..... 10% of estimated costs R&D..... 15% of estimated costs A&E Services..... 6% of estimated costs Formula should provide incentive effectiveness over variation in costs throughout the full range of reasonable foreseeable variation from target cost	Final fee determination by Government not subject to disputes clause. CPAF is not for procurements where cost, delivery and incentive factors are measurable	Not for development of major weapons once exploration indicates engineering development is feasible	Determination that no other type of contract is suitable	No other contract type suitable; definitive contract at earliest practicable date; maximum liability limited to not more than 50% total estimated cost	Firm fixed-price, fixed-price with escalation, or fixed-price with redetermination only Use only when item or service is commercial or modified-commercial in type and when recurring need anticipated
APPROVALS	None	None	Contracting Officer	Stated Time or Times None Retroactive after completion: written approval of Procurement Officer	Determination and Findings by Contracting Officer (except for cost-sharing) Cost-Sharing: Individually by the Procurement Officer		(Same as CPFF and CPIF)			Prior approval of Deputy Administrator (see NASA PR 3.408(c))	None
MISC.	ADVERTISED OR NEGOTIATED PROCUREMENTS Preferred over all type Minimum Administration	Reduces fixed-price risk for Contractor	NEGOTIATED PROCUREMENTS ONLY May also use performance incentives	Large amount of administration required by Contractor and Government	NEGOTIATED PROCUREMENTS ONLY. "Costs" defined in NASA PR (part 15) Government auditing and administrative surveillance		Can use combination of CPAF/IF or CPIF/AF as appropriate to reflect degree of subjectivity and objectivity of performance measurement	*Least* Contractor responsibility for cost of performance; *Least Preferred*	NEGOTIATED PROCUREMENTS ONLY Constant Government surveillance necessary	Greatly restricted: see NASA PR 3.408	Advertised or negotiated procurements. Delivery on orders or 'calls' under contract. Obligation of funds on orders and, when applicable, on stated minimum total quantity

FIXED-PRICE TYPE CONTRACTS



ALLOCATION OF RISK

THE FIRM FIXED-PRICE CONCEPT



2. PRICE FOR ORIGINAL WORK REMAINS FIXED DURING PERFORMANCE

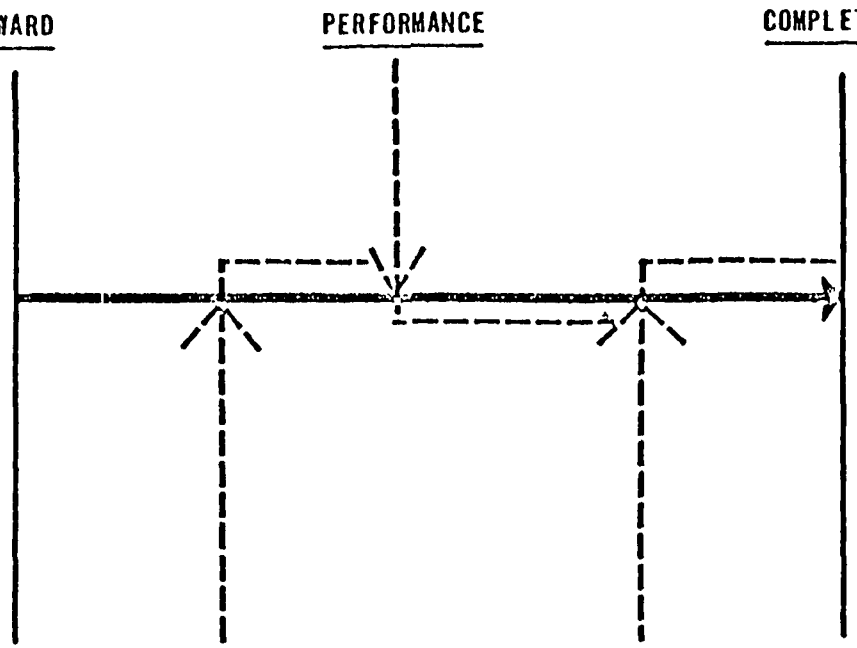
THE ESCALATION CONCEPT

NORMALLY APPLIED TO:

- LABOR RATES
- MATERIAL PRICES

PRE-AWARD

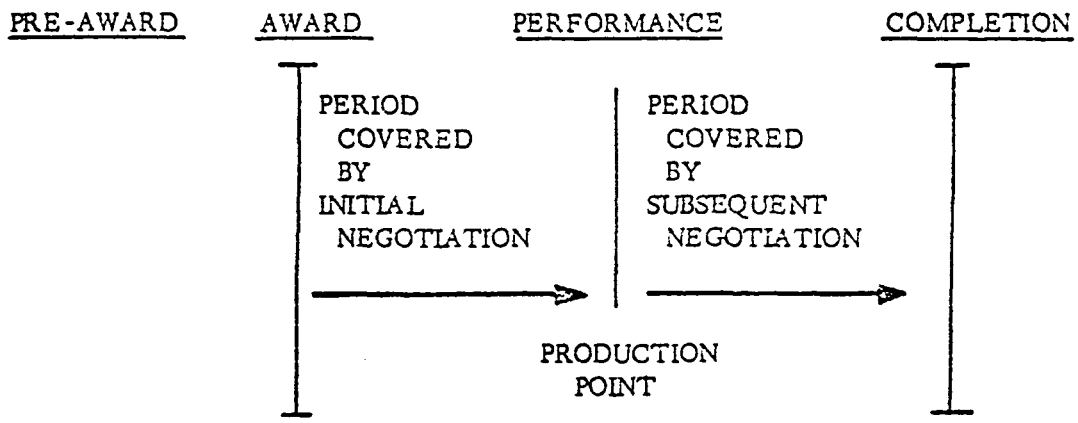
1. ESTABLISH A FIXED PRICE
2. IDENTIFY THE ITEMS AND BASE PRICES SUBJECT TO ESCALATION
3. INCLUDE AN ESCALATION CEILING
4. INCLUDE GROUND RULES FOR ESCALATING PRICES DURING THE CONTRACT



5. ESCALATE UPWARD OR DOWNWARD AS PRICES FOR ESCALATED ITEMS RISE OR FALL

THE FIXED-PRICE INCENTIVE CONCEPT

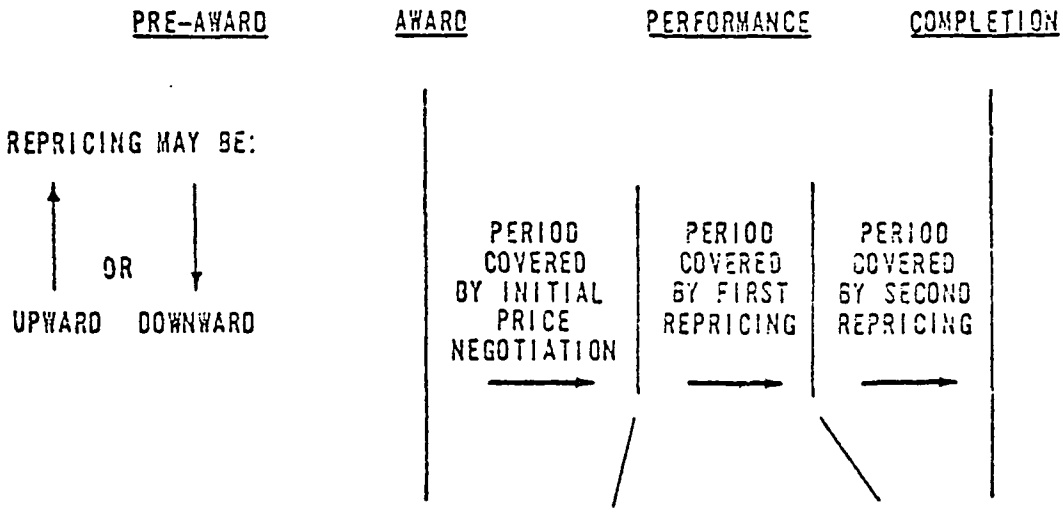
FIXED-PRICE INCENTIVE (SUCCESSIVE TARGETS)



INITIAL NEGOTIATION	NEGOTIATION	SETTLEMENT
INITIAL TARGET COST	FIRM TARGET COST	IF FIXED-PRICE INCENTIVE
INITIAL TARGET PROFIT	CALCULATE FIRM TARGET PROFIT	(FIRM TARGET)
PROFIT CEILING	CONTRACT TYPE	FINAL NEGOTIATED COSTS
FORMULA FOR FIRM TARGET PROFIT	(FIRM FIXED-PRICE OR FIXED-PRICE INCENTIVE, FIRM TARGET)	PERFORMANCE ACHIEVEMENT
PRODUCTION POINT (FOR APPLICATION OF FIRM TARGET PROFIT FORMULA)		PROFIT DERIVATION

THE REDETERMINATION CONCEPT

1. PROSPECTIVE REDETERMINATION AT STATED INTERVALS



INITIAL PRICE NEGOTIATION

1. ESTABLISH TOTAL EST. COST OF JOB
2. ESTABLISH FIRM PRICE FOR INITIAL PERIOD OF PERFORMANCE
3. ESTABLISH INTERVALS AT WHICH PRICE WILL BE PROSPECTIVELY REDETERMINED
4. ESTABLISH WHETHER PRICE CEILING WILL BE USED AND THE DOLLAR AMOUNT OF THE CEILING

FIRST PRICE REDETERMINATION

5. START REPRICING AT POINT SPECIFIED IN CONTRACT
6. ESTABLISH FIRM PRICE FOR NEXT PERIOD OF PERFORMANCE
7. APPLY REPRICING ONLY TO FUTURE PERIOD

SECOND PRICE REDETERMINATION

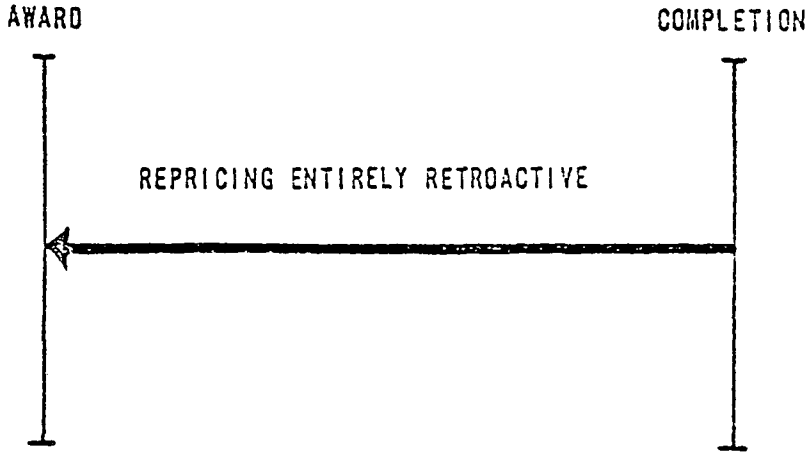
8. TAKE SAME STEPS AS WITH FIRST REPRICING

THE REDETERMINATION CONCEPT

II RETROACTIVE REDETERMINATION AFTER COMPLETION

LIMITS

R&D CONTRACTS OF $100,000 OR LESS



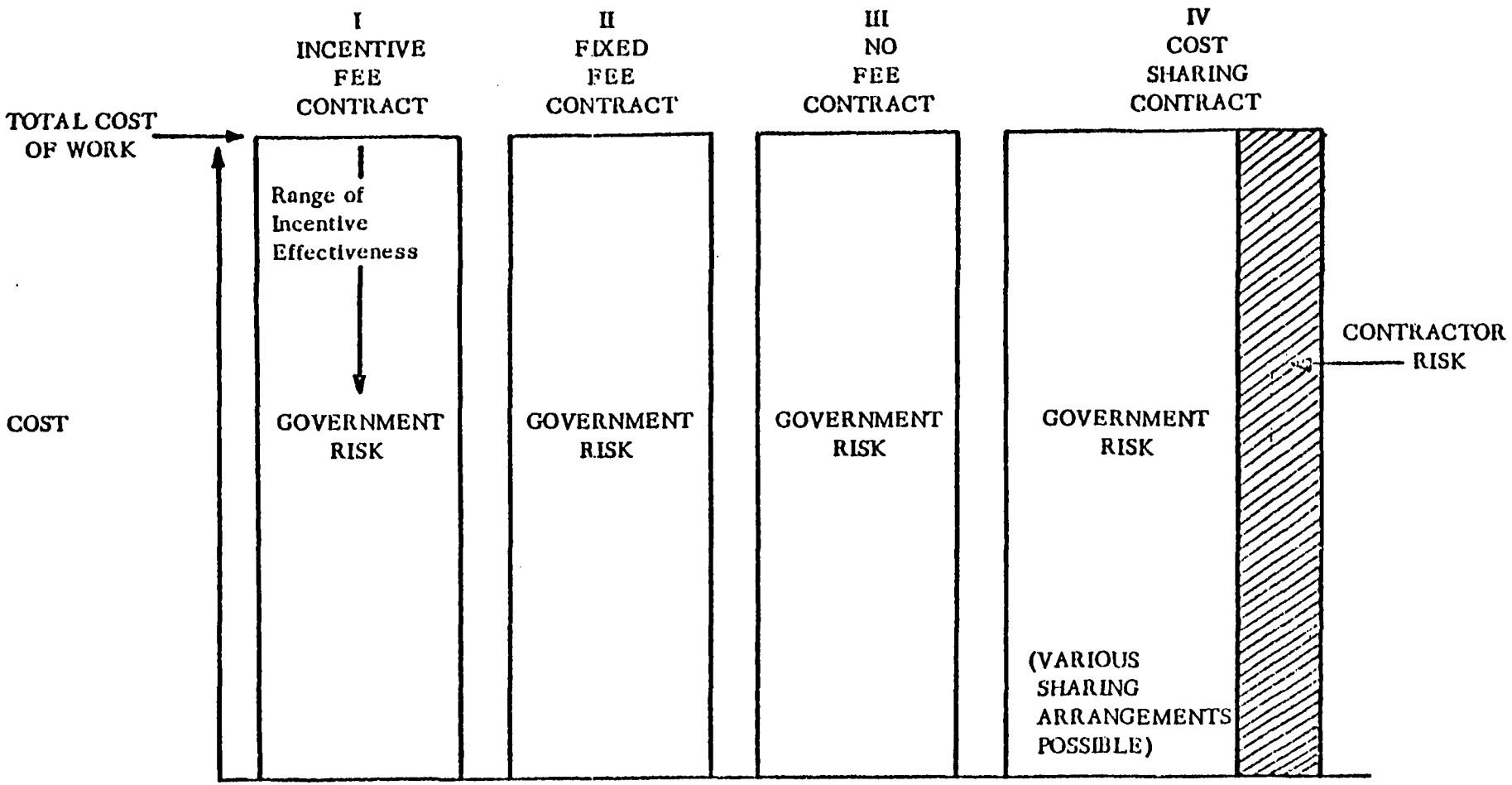
INITIAL PRICE NEGOTIATION

1. ESTABLISH TOTAL ESTIMATED COST
2. ESTABLISH CEILING PRICE
3. SPECIFY THAT REDETERMINATION WILL TAKE PLACE UPON COMPLETION OF CONTRACT

POINT OF REDETERMINATION

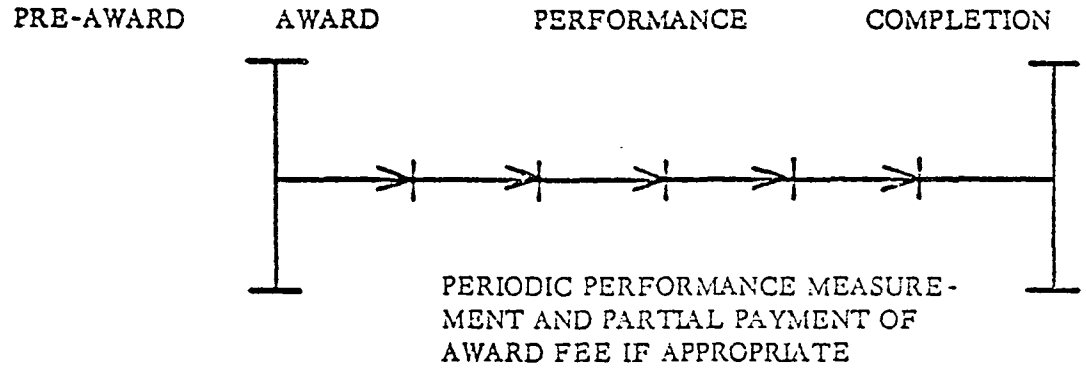
4. REDETERMINE PRICE OF THE PROCUREMENT

COST-REIMBURSEMENT TYPE CONTRACTS



ALLOCATION OF COST RISK

THE COST-PLUS-AWARD-FEE CONCEPT



NEGOTIATE	SETTLEMENT
CRITERIA FOR PERFORMANCE	FINAL ACTUAL COSTS
ESTIMATED COST	FINAL PERFORMANCE ACHIEVEMENT
BASE FEE	FINAL TOTAL FEE (BASE PLUS AWARD) DETERMINATION
MAXIMUM FEE	

SUMMARY OF PROJECT OFFICER'S RESPONSIBILITIES

Areas of responsibility of the project officer during contract performance are summarized below:

- Monitor the contractor's performance to assure compliance with technical requirements of the contract.
- Review and approve progress reports, technical reports, and other items required for approval. Notify the contracting officer if said reports or other items submitted are to be rejected and state basis for rejection.
- If performance is not proceeding satisfactory or if problems are anticipated, it is essential that the contracting officer be notified as to the cause and recommended course of action from a technical standpoint. Immediate notification is essential to assure that the contracting officer takes appropriate action to protect the Government's rights under the contract.
- In the event the contractor desires to propose a change, he should be advised to submit his request in writing to the contracting officer indicating the effect the change will have on the contract terms and conditions. The project officer will be required to review the proposed change and advise the contracting officer as to whether the proposed change should be incorporated into the contract.
- Assure that changes in work under a contract are not implemented before written authorization or a contract modification is issued by the contracting officer. Costs for work performed may not be allowed if not authorized under the contract. Unauthorized changes embarrass the Government as well as the contractor. No change or commitment should be directed without prior written authorization by the contracting officer.
- Recommend in writing to the contracting officer changes desired in the contract with justification for the proposed change.
- Furnish technical advice relative to contracting officer approvals of subcontracts, overtime, travel to general purpose meetings, etc.
- Keep the contracting officer informed on the context of communications with the contractor in order to prevent possible misunderstandings or situations that could affect contract terms and conditions and become the basis of future claims against the Government.
- Make site visit to the contractor's facility and check contractor performance to include the following:
  a. Actual performance versus scheduled and reported performance. Inform contracting officer of any adverse conditions noted.
  b. Changes in technical performance which may affect financial status, personnel or labor difficulties, overextension of facilities, etc.
  c. Verify that the number of the employees charged to the contract are actually performing work under the contract. For example, if the voucher claims that ten persons are assigned to the contract on a full-time basis, there should be a determination that individuals are performing work under this contract. Also, the project officer should evaluate whether the number of personnel assigned are in fact necessary to fulfill contract requirements.
- At the completion of the contract, advise the contracting officer concerning the following:
  a. All articles and services required to be furnished and/or performed under the contract have been technically accepted.
  b. Contractor compliance with Patent Rights and Royalties clauses of the contract.
  c. Recommend disposition of any Government Furnished Property in possession of the contractor.
  d. Verify proper consumption and use of Government Furnished Property by the contractor.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION **LETTER OF CONTRACT ADMINISTRATION DELEGATION, GENERAL** (See instructions on reverse and NASA PR 51.300)	1. NASA CONTROL NO.	2. ADMINISTRATION OFFICE CONTROL NO.*
3. TO:	4. FROM:	
5. PRIME CONTRACTOR OR SUBCONTRACTOR AND PLACE OF PERFORMANCE *(See instructions on reverse)*	6. CONTRACT NO. AND DATE	7. FACE VALUE
	8. CONTRACT TYPE	9. COMPLETION DATE
10. CONTRACT END ITEM OR SERVICE *(Describe briefly)*		

11. You are hereby authorized to act as my representative in the administration of this contract. The functions delegated to you for administration are those listed on the reverse of this form *(Less those that are specifically withheld on NASA Form 1430A attached hereto, if any)* and additional functions described on NASA Form(s) 1430A attached hereto, if any.

12. You are further authorized, within the limits of the contract, to redelegate the functions delegated to you by par. 11 above, unless redelegation authority is specifically withheld on NASA Form 1430A attached hereto. Redelegation of functions to be performed on NASA installations, or NASA-controlled launch sites, will be directed to the NASA Procurement Officer of the installation concerned. Should you desire that the redelegated functions be performed by other than the NASA Procurement Office receiving the delegation, your letter of redelegation shall so state.

13. The Production Surveillance Number requested is _____. *(Use only for delegations to DOD.)*

14. You are requested to provide the NASA Contracting Officer with copies of all communications relating to the administration of this contract that you consider significant.

15. Please acknowledge acceptance of this delegation by returning two signed copies of NASA Form 1431 *(attached)* to the NASA Contracting Officer within 5 days of receipt.

16. TYPED NAME OF CONTRACTING OFFICER	17. SIGNATURE OF CONTRACTING OFFICER	18. DATE SIGNED

**For use by the Contract Administration Office receiving this delegation.*

19. ADDITIONAL INFORMATION FOR CONTRACT ADMINISTRATION OFFICES *(See instructions on reverse)*

To assist you in systematically accounting for and controlling NASA workload, the major functional areas requiring administration by your office on this contract are indicated below, along with the NASA functional specialists to contact when necessary. Please be advised that this information does *not* constitute any part of the official delegation above, but is furnished and should be regarded as supplemental information.

FUNCTIONAL AREA	CONTACT NAME (1)	CODE (2)	PHONE (3)
☐ a. CONTRACT ADMINISTRATION			
☐ b. QUALITY ASSURANCE *(Includes QA Engineering, if any)*			
☐ c. PRODUCTION *(Includes Production Engineering, if any)*			
☐ d. PROPERTY AND PLANT CLEARANCE			
☐ e. TRANSPORTATION			
☐ f. ENGINEER SUPPORT OTHER THAN QA AND PRODUCTION ENGINEERING			

The functions listed below are delegated pursuant to paragraph 11 of this form. The functions shall be performed only when necessary to the administration of this contract and when not specifically withheld by the NASA Contracting Officer on NASA Form 1430A.

(i) Review contractor's compensation structure;

(ii) Review contractor's insurance plans;

(iii) Review and approve or disapprove contractor's requests for payments under the progress payments clause;

(iv) Negotiate provisional overhead rates, or determine billing rates, when the contract contains a negotiated overhead rates clause. Negotiate final overhead rates when the contract contains a negotiated overhead rates clause and when the *contractor is not* under the negotiation overhead rates procedure pursuant to Tri Service Negotiation;

(v) Negotiate advance understandings on particular cost items for the signature of the NASA Contracting Officer, except when responsibility is placed elsewhere;

(vi) Review and evaluate contractor's proposals for contract changes and furnish comments and recommendations to the NASA Contracting Officer. Negotiate with the contractor when requested by the NASA Contracting Officer;

(vii) Manage special bank accounts;

(viii) Assure timely notification by the contractor of any anticipated overrun or underrun of the estimated cost under cost-type contracts;

(ix) Review, approve or disapprove, and maintain surveillance of the contractor's procurement system when consent to the placement of subcontracts has been delegated;

(x) Monitor contractor's financial condition and advise the NASA Contracting Officer when contract performance is jeopardized thereby;

(xi) Issue tax exemption certificates when applicable, and assure that the contractor advises NASA of changes in contract price, if any;

(xii) Conduct post-award orientation conferences;

(xiii) Prepare findings of fact under the Disputes Clause and forward with recommendations to the NASA Contracting Officer;

(xiv) Assure processing of duty free entry certificates for execution by the NASA Contracting Officer;

(xv) Assure contractor compliance with small business and labor surplus subcontracting and set-aside requirements, and provide advice on small business and labor surplus area matters as required;

(xvi) Issue cure and show cause letters after concurrence of the NASA Contracting Officer;

(xvii) Monitor the contractor's system for control of overtime;

(xviii) Assure that overtime compensation is in accordance with the terms of the contract, or in the absence of contractual coverage, that any excepted overtime charged is reasonable and properly allocable.

(xix) Perform Property Administration;

(xx) Perform plant clearance officer functions, assuring screening of contractor inventory by NASA prior to additional screening, redistribution and disposal;

(xxi) Evaluate contractor's requests for facilities and changes to existing facilities, and provide the NASA Contracting Officer with appropriate recommendations;

(xxii) Assure required screening of facility items before acquisition by contractor;

(xxiii) Evaluate contractor's requests for approval to use facilities in accordance with the Use and Charges Clause and provide the NASA Contracting Officer with appropriate recommendations;

(xxiv) Assure collection of any rental due for use of facilities;

(xxv) Assure reporting of NASA facilities no longer needed by the contractor;

(xxvi) Perform production support, surveillance and status reporting of potential and actual slippages in contract schedules;

(xxvii) Monitor compliance with labor and industrial relations matters under the contract, apprising the NASA Contracting Officer of actual or potential labor disputes, and removing material from strike-bound contractor's plants upon instructions from the NASA Contracting Officer;

(xxviii) Assure contractor compliance with applicable safety requirements of the contract, including the handling of hazardous and dangerous materials and processes;

(xxix) Make appropriate comments to the NASA Contracting Officer on any inadequacies noted in specifications;

(xxx) Assure timely submission of required reports.

INSTRUCTIONS TO NASA CONTRACTING OFFICERS FOR ACCOMPLISHING THIS NASA FORM 1430

GENERAL – NASA Form 1430 shall be used to delegate the mandatory contract administration functions listed above to other Government agencies and to other NASA installations (See NASA PR 51.304). NASA Form 1430A shall be accomplished when warranted under conditions described under NASA PR 51.304 (g). When NASA Form 1430A is used it shall *always* be forwarded to a contract administration office *as an attachment to a fully accomplished NASA Form 1430*. This procedure applies even though a NASA installation retains the administration of *all* functions listed above and delegates, on NASA Form 1430A, only an optional function such as quality assurance.

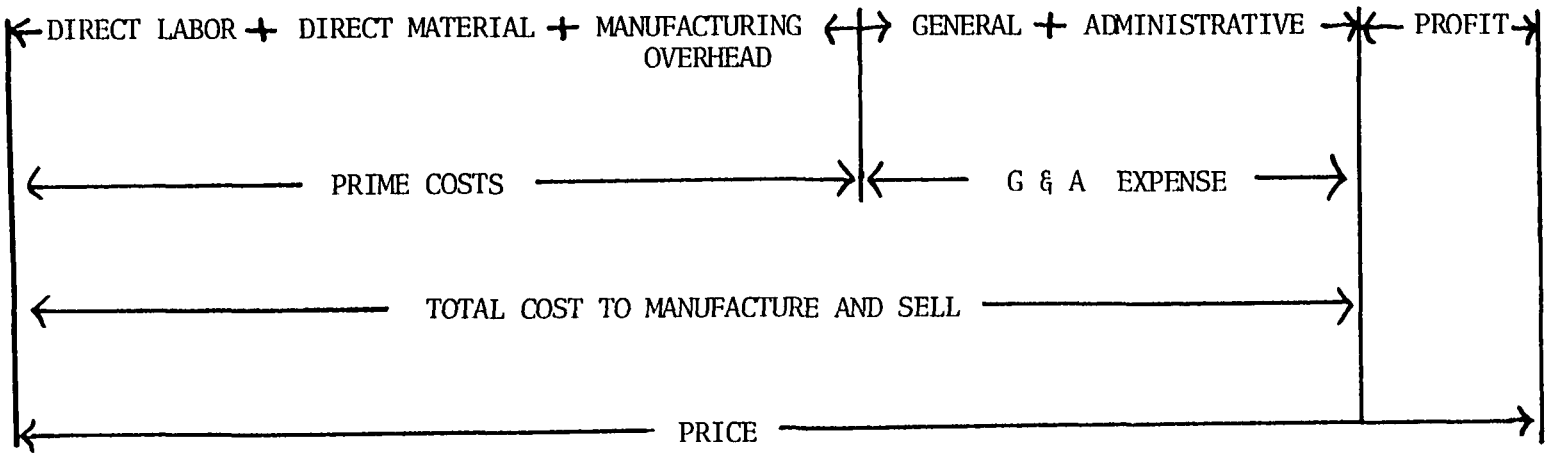
BLOCK NO. 5 – This block should contain the place of contract *performance*, if known, and not the place of contract *signature*, unless they are the same. For example, when a contract is signed by company "x" at corporate headquarters in New York, but the place of performance is Tucson, Arizona, block 5 should read "Company 'x,' Tucson, Arizona."

Paragraph 19 –

a. Place an "x" *only* in those blocks when the contract administration office is required to perform the function in the administration of the contract. For example, the "Production" and "Property and Plant Clearance" blocks would not be "x'd" if these functions are not required to be performed by the contract, *even though* they are automatically delegated above.

b. The NASA contact individual should only be entered when the corresponding block contains an "x."

PRICE/COST DIAGRAM



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

TERMINATION AUTHORITY

INSTRUCTIONS

1. This form will be used to initiate termination of a NASA contract.
2. Include all pertinent remarks or instructions for completing this termination. Attach additional pages if necessary *(one copy of attachment for each copy of this form)*.
3. Insofar as practicable, this form shall be HAND CARRIED to avoid expense to the Government occasioned by delay in accomplishing termination.
4. A complete termination is a termination of all undelivered items on a contract after the termination becomes effective. A partial termination is a termination wherein items remain on the contract to be delivered after the termination becomes effective.
5. Initiating authority will complete items 1 through 9 of this form and item 10 if a partial termination.
6. Use part III, "Remarks," if necessary.
7. Number of copies required: 6.

I. TERMINATION REQUEST

1. TO *(Procurement office, including organization code)*	2. FROM *(Activity originating Procurement Request, including initiator, organization code, and telephone extension)*
3. NAME OF CONTRACTOR	4. STREET ADDRESS OF CONTRACTOR *(Including ZIP Code)*
5. CONTRACT OR PURCHASE ORDER NO. / 6. PROPERTY CL	7. TERMINATION EFFECTIVE: ☐ IMMEDIATELY ☐ DATE ☐ OTHER *(Explain in part III)*

8. TYPE OF TERMINATION RECOMMENDED

a. CONVENIENCE OF THE GOVERNMENT			b. DEFAULT OF THE CONTRACTOR
☐ COMPLETE ☐ PARTIAL	CONTRACT PRESENTLY DELINQUENT ☐ YES ☐ NO	ACTIONABLE BASIS FOR DEFAULT ☐ YES ☐ NO	☐ COMPLETE ☐ PARTIAL *(Specify items)*

9. JUSTIFICATION FOR TERMINATION

10. ITEMS TO BE TERMINATED *(SECURITY REQUIREMENT: If contract is classified, prepare in accordance with NASA Security Regulations)*

CONTRACT ITEM NO.	NOMENCLATURE	UNIT OF MEASURE	QUANTITY TO BE TERMINATED	TOTAL *(Dollars)*
	TOTAL CPIT *(Estimate when necessary)* ▶			

11. COORDINATION AND APPROVAL

COORDINATION			APPROVAL		
DATE	INITIALS	ORG CODE	TYPED NAME AND SIGNATURE	ORG CODE	DATE

II. TERMINATION AUTHORIZATION

12. TO *(Authorized Termination Contracting Officer)*

13. FROM *(Procurement Office: initiator, organization code, and telephone extension)*

14. INFORMATION CONTAINED IN PART I HEREOF HAS BEEN EXAMINED AND IS:

☐ CORRECT ☐ INCORRECT *(Note corrections, if any, in part III, "Remarks")*

15. TYPE OF TERMINATION RECOMMENDED

a. CONVENIENCE OF THE GOVERNMENT			b. DEFAULT OF THE CONTRACTOR
☐ COMPLETE ☐ PARTIAL	CONTRACT PRESENTLY DELINQUENT ☐ YES ☐ NO	REVIEWED FOR ACTIONABLE BASIS FOR DEFAULT ☐ YES ☐ NO	☐ COMPLETE ☐ PARTIAL *(Specify items)*

16. JUSTIFICATION FOR TERMINATION *(Attach additional page if necessary)*

17. TERMINATION EFFECTIVE	18. AGENCY OF ADMINISTRATION
☐ IMMEDIATELY ☐ DATE _____ ☐ OTHER *(Explain in part III)*	

19. CONTRACT PRICE ITEMS TERMINATED	20. AMOUNT OF CONTRACT *(Include all supplements)*	21. TYPE OF CONTRACT

22. TERMINATION CLAUSE NO.	23. AUTHORIZED CERTIFYING OFFICER

24. NAME AND ADDRESS OF ☐ SURETY ☐ ASSIGNEE

25. COORDINATION AND APPROVAL

COORDINATION			APPROVAL		
DATE	INITIALS	ORG CODE	TYPED NAME, GRADE AND SIGNATURE	ORG CODE	DATE

III. REMARKS *(Use additional pages if necessary)*

IV. TERMINATION ASSIGNMENT

26. TO *(Activity to which assigned for settlement)*

INFO COPY TO:

27. FROM *(Assigning Activity: organization code and telephone extension)*

28. DOCKET NO. _____ IS ASSIGNED TO YOUR ACTIVITY FOR SETTLEMENT. DATE _____

29. ATTACHMENTS	30. TYPED NAME AND TITLE OF AUTHORIZED INDIVIDUAL	31. SIGNATURE

GPO 881-265

GLOSSARY OF PROCUREMENT TERMS

This Glossary provides a ready reference to many terms associated with government procurement; it is not an exhaustive list, but is indicative of procurement terminology. This glossary is intended to aid the student in preparing for and participating in class discussion.

NASA PR 1.101. This Regulation, issued by the Assistant Administrator for Procurement under authority delegated by the Administrator, establishes for the National Aeronautics and Space Administration (NASA) uniform policies and procedures relating to the procurement of property and services under the authority of the National Aeronautics and Space Act of 1958, as amended (Public Law 85-568; 42 U.S.C. 2451 *et seq.*), Chapter 137, Title 10, of the United States Code, or other statutory authority.

DAR 1-101. This Regulation, issued by the Assistant Secretary of Defense (Installations and Logistics) by direction of the Secretary of Defense and in coordination with the Secretaries of the Army, Navy, and Air Force and the Director of the Defense Supply Agency, establishes for the Department of Defense, uniform policies and procedures relating to the procurement of supplies and services under the authority of Chapter 137, Title 10 of the United States Code, or under other statutory authority.

Administrative and Regulatory Groups

Board of Contract Appeals	Board established to act as the authorized representative of the Administrator in hearing, considering, and determining appeals made by contractors under the Disputes clause of the contract.
Comptroller General, The	Head of the General Accounting Office, appointed by the President (and confirmed by the Senate) for a fifteen-year term. Authorized to audit, settle, and adjust public accounts and claims against the government.
General Accounting Office	Agency in the legislative branch headed by the Comptroller General and responsible solely to the Congress. Determines whether public funds are expended in accordance with appropriations and law.

Communications with Contractors

Bidders Conference	In formally advertised procurements, meeting of prospective bidders arranged by the contracting officer during the solicitation period to make sure that firms solicited fully understand the procurement and to provide them with an opportunity to ask questions.

Preproposal Conference	In negotiated procurements, a meeting held with contractors a few days after Requests for Proposals have been sent out, to promote uniform interpretations by all prospective contractors.
Presolicitation Conference	Meeting held before research and development proposals are requested by the contracting officer. Permits cognizant technical personnel to discuss proposed work with prospective contractors and elicits contractors' interest in pursuing the task.

Contract Modifications

Change Order	Unilateral directive issued by the contracting officer, pursuant to the Changes clause contained in the contract, which orders the contractor to modify the contract requirement. Under the authority of the standard Changes clauses, modifications may be made in (i) the designs, drawings, and specifications; (ii) the method of shipment or packing; and (iii) the place of delivery, so long as the changes fall within the general scope of the contract. The contractor must comply with the change order. Equitable adjustments in the contract price and/or delivery schedule may be negotiated after the change is issued.
Supplemental Agreement	Bilateral amendment to a contract by which the government and the contractor settle price and/or performance adjustments to the original basic contract. Requires the consent of both parties.

Contract Types

Basic Agreement	Written instrument of understanding between a contractor and the government which sets forth the contract clauses applicable to future procurements entered into between the parties during the term of the basic agreement. Used to eliminate extensive and costly negotiation where a substantial number of separate contracts may be entered into with a contractor over a definite period of time.
Cost Reimbursement Contract (CR)	Contract type that grants the contractor reimbursement for his actual costs in fulfilling a requirement. Used mainly in research and development work. Includes cost, cost sharing, cost-plus-incentive-fee (CPIF) and cost-plus-fixed-fee (CPFF) contracts.

Fixed-Price Contract (FP)	Preferred contractual type. Calls for a specified or maximum payment to a contractor to fulfill a requirement. Includes firm-fixed-price (FFP), fixed-price-with-escalation (FPE), fixed-price-incentive (FPI), and fixed-price-redeterminable (FPR) contracts.
General Provisions	So-called "boiler-plate" clauses for the type of contract contemplated. Defines the basic rights of the parties, as distinguished from the specific terms for the particular procurement.
Indefinite Delivery Contract	Contract of either (i) a requirements type, (ii) an indefinite quantity type, or (iii) a definite quantity type, which sets forth only general quantity and delivery requirements and is implemented as needs arise.
Letter Contract	Written preliminary contractual instrument in the form of a letter which authorized the contractor to start performance immediately.
Purchase Order	Used to procure supplies and nonpersonal services when the aggregate amount involved in any one transaction does not exceed $10,000.
Time and Materials/ Labor-Hour Contract	Contract type used to pay for work on an hourly basis; e.g., repair work. T-M includes material cost; L-H does not.

Elements of Cost Proposals

Direct Labor	Labor applied directly to a contractual effort by the supplier.
Fee	Compensation paid a contractor under a cost-reimbursement type contract. The law and regulations establish maximum fees according to the nature of the work.
General and Administrative Expense (G&A)	Management salaries and expenses that are not directly chargeable to a contract, but are prorated over all of a supplier's business in much the same way that overhead is.
Indirect Labor	Labor which is not directly connected with the contractual effort, but a proportionate share of which is charged against a contract; i.e., supervisory and accounting personnel.

Plant or Engineering Overhead	Pool of supplier expenses, not directly chargeable to a contract, that is spread across all of the supplier's business on a pro rata basis; i.e., rent, electricity, and depreciation.

Financial Management

Allotment	An authorization, stated on an agency form from the Head of the Budget Office to an individual, to incur commitments or obligations within a specific amount pursuant to an appropriation or other statutory authority. The allotment constitutes a legal limitation on the incurring of commitments, obligations, and expenditures (Section 3679 R.S. - 31 U.S.C. 665).
Apportionment	The amounts made available by the Office of Management and Budget for obligation and expenditure in an appropriation or fund account. The amounts may be available only for specified time periods, activities, functions, projects, objects, purposes, or combinations thereof.
Appropriation	An Act of Congress which provides the necessary funds to enable NASA to incur obligations and to make payments out of the Treasury for specified purposes.
Commitment	Firm administrative reservation of funds based on firm requisitions, Procurement Requests, authorizations to execute contracts, or other authorized written evidence which authorize the creation of obligations without further recourse to the official responsible for certifying the availability of funds. (Total commitments equal the sum of unobligated commitments and obligations incurred.)
Cost, Accrued	The recognition of a material used or provided or a service rendered as a cost at the time of application, regardless of "whether" payment is made before the event, concurrently with the event, or will be made at a later time.
Funding	The issuance of allotments which provide authority to incur commitments and obligations and make payments within appropriations made by Congress, apportionment limitations established by OMB, and approved resources authorization.
Funding, Incremental	Normally a specific term relating solely to the increasing of a contract ceiling in successive increments.

Obligation Authority	Authority to incur obligations granted by an allotment advice or a "citation of funds" authorization.
Obligations	Amounts of orders placed, contracts awarded, services received, or other similar transactions which require disbursements not preceded by the recording of obligations, and reflects adjustments for differences between obligations and actual disbursements. Obligations are the sum of undelivered orders, liabilities, and disbursements.

Financing Contractors

Advance Payments	Advances of money made available by the government to a bank for a contractor to use in effecting contract performance.
Assignment of Claims	An assignment by the contractor of monies due or to become due the contractor under a government contract. The assignment is made to a bank or other financial institution and serves as collateral to secure a loan made by the bank or financing institution to the contractor for the purpose of financing the contract. After an assignment has been made, all payments under the contract will then be made directly to the assignee bank or financing institution.
Progress Payments	Payments made to a prime contractor during the life of a fixed-price contract on the basis of a percentage of either his incurred total costs or his total direct labor and material costs.
Vouchering of Costs	Periodic payments made to a contractor under a cost-type contract, reimbursing him, on the basis of his vouchers, for funds actually spent.

Formal Advertising

Bid/Bidder	A prospective contractor's reply to the solicitation form used for formally advertised procurements (IFB). Needs only the government's acceptance to constitute a binding contract. Firm submitting a bid is termed a bidder.

Formal Advertising	The preferred method of government procurement as stipulated by Title 10 U.S.C. 2304(a). Method involves sealed bids, public opening, and award to the responsive and responsible low bidder on the basis of price.
Invitation for Bid (IFB)	Solicitation document used in formal advertising (and in Step Two of two-step advertising.)
Responsible	A term used to indicate that a contractor has the financial resources, personnel, facilities, integrity, and overall capability to complete a government contract successfully.
Responsive	A term used to indicate that a bid from a supplier offers to supply the precise materials and/or services set forth in an IFB.
Two-Step Advertising	Form of formally advertised procurement. Step One consists of the evaluation of technical proposals to select contractors whose proposals are acceptable. In Step Two, only those contractors whose proposals have been rated acceptable may bid. (Bidding then proceeds as in straight formal advertising.)

Government-Furnished Property (GFP)

Government-Furnished Property (GFP)	Government-owned property furnished to a contractor, or acquired by a contractor during performance as a direct charge to a contract.
Industrial Facility	Property other than material and special tooling used in performance of a contract or subcontract. Includes real property, rights in real property, buildings, structures, improvements, and plant equipment.
Material (GFM)	Anything incorporated into an end item or consumed in its manufacture. Includes not only raw and processed material, but also parts, components, assemblies, and even usable tools. Government-furnished equipment is normally categorized as material.
Special Tooling	All jigs, dies, fixtures, molds, patterns, special taps, special gauges, special test equipment, other special equipment and manufacturing aids, and replacements thereof, acquired or manufactured by the contractor for use in the performance of a government contract. Items of special tooling must be of a specialized nature that, without substantial modification or alteration, their use is limited to production peculiar to governmental needs.

Negotiation

Determination and Findings (D&F)	Written justification by the contracting officer or higher authority for using a particular statutory authority to allow negotiation of a procurement. Also used to justify use of CPFF contracts, cost overruns, and advance payments.
Negotiation	Prescribed methods of procurement when formal advertising is not considered feasible. Award not necessarily based on price.
Negotiation Authority (Exceptions)	Legal authority cited in Title 10 U.S.C. par. 2304(a) to use negotiation rather than formal advertising as the method of procurement. Sometimes called negotiation exceptions.
Proposal/Offer	A prospective contractor's reply to an RFP in negotiated procurement. Sometimes called an offer. Includes technical, management, and cost proposals. Firm submitting a proposal is termed an offeror.
Request for Proposal (RFP)	Primary solicitation document used in a negotiation procurement.
Request for Quotation (RFQ)	Form (Standard Form 18) used in a negotiated procurement when data submitted by a prospective contractor are to be used only for informational purposes and do not constitute a legal offer.
Source Evaluation Board (SEB) or Proposal Evaluation Board or Proposal Evaluation Team or Technical Evaluators	Group of agency personnel formally appointed to assess and evaluate prospective sources for a competitively negotiated research and development procurement when (i) estimated contract cost will exceed $1 million; (ii) the contract itself does not exceed $1 million, but the contract plus follow-on work for later phases of the same contract will together exceed $1 million; or (iii) other factors make use of the board desirable. Board may have technical and business committees.

Patents and Data

Authorization and Consent Clause	Contractual clause protecting the contractor from injunction if he should infringe a patent. Any suit would have to be filed against the government.
Copyright	The exclusive right to reproduce, publish, and sell the matter and form of a piece of written work.

Data	All writings, drawings, and so on, relating to design manufacturing processes, or the functioning of an item produced under a contract. Includes (i) proprietary data and (ii) descriptive data.
Patent Rights	Any rights accruing to government under the New Technology clause or the Rights in Inventions clause. Could be either ownership of a patent or a license to use it.
Proprietary Data	Data owned by a contractor. Usually obtained prior to his entering into a contract.

Miscellaneous

Classified Procurement	Any contract or purchase order that requires, or will require, access to any classified information by the contractor or his employees, in the contract. A contract may be classified even though the contractual document or the end item to be produced is unclassified.
Commerce Business Daily	Formerly titled *Synopsis of United States Government Proposed Procurement, Sales and Contract Awards*. Publishes not only these facts, but also information on subcontracting opportunities and advance notices of procurements.
Cost Principles	As set forth in NASA PR Part 15, the cost principles dictate the allowability, reasonableness, and allocability of contractors' costs under cost-reimbursement contracts.
Joint Consolidated List of Debarred, Ineligible, and Suspended Contractors (JCL)	List of contractors who have, or who are believed to have, violated statutes or broken commitments in their contractual relationships with the government.
Make-or-Buy Program	The part of contractor's written plan for the development or production of an end item that cutlines the subsystems, major components, assemblies, subassemblies, and parts he intends to produce or assemble himself ("make"), and those he intends to purchase from others ("buy").
Federal Procurement Regulations (FPR's)	The basic document governing civilian agency Federal procurements. The FPR's contain legal requirements, regulations, and policies that bear on procurement.

Overrun	Under a cost-reimbursement type contract, costs in excess of the estimated cost. The contractor is not required to perform work and incur costs in excess of the contract cost limitation unless so directed, in which event he is entitled to reimbursement of the overrun costs up to the new ceilings authorized. The government is not required to reimburse the contractor for unauthorized overruns.
Pre-Award Survey	Physical survey and evaluation of a prospective contractor's plant, equipment, and capacity to perform (both technically and financially) made before agency decides to sign a contract. Used in those circumstances where additional information is required for a determination of the responsibility of the prospective contractor(s).
Procurement Plan	A complete outline of the method by which the contracting officer expects to complete the procurement task. Usually prepared in written form, prior to solicitation, in negotiated procurement involving more than $100,000.
Royalties	The term "royalties" means any costs or charges in the nature of royalties, license fees, patent or license amortization costs, or the like for the use of or for rights in patents or patent applications.
Procurement Planning	Any planning performed by government personnel prior to or during the life of a contract that conditions or affects contractual actions with regard to a specific requirement or a specific project or program.
Procurement Request	Initiating document that describes the required supplies or services to be procured. Serves as the basis on which the contracting officer issues a solicitation.
Qualified Products List (QPL)	List of products that, because of length of time required for test and evaluation, are tested in advance of procurement to determine which suppliers can properly comply with specification requirements.
Small Business Representative	Member of the Small Business Administration staff who works with an agency on its Small Business Program.

CHAPTER 22

CASE STUDIES

CASE SCHEDULE

First Day:	TO FORGE OR CAST	*Interpretation of Specifications*
	STEELE'S DILEMMA	*Solicitation*
	UNIVERSAL MOTORS	*Type of Contract*
	THE ALTERNATE BID	*Two-Step Formal Advertising*
	CENTURY CORPORATION	*Change Order*
	THE IMPROPER APPROACH	*Contracting Authority*
Second Day:	THE BEST OF EVERYTHING	*Statement of Work*
	THE NO CONTRACT CONTRACTOR	*Formalization of Informal Commitment*
	THE OHM COMPANY	*Quality Assurance*
	THE THREE COATS	*Constructive Change*
	NEW ERA PLASTICS COMPANY	*Disputes*
	CHANGE IN REQUIREMENTS	*New Work*
Third Day:	THE TERMINATION-REPROCUREMENT CASE	*Contract Termination*
	THE FAIRFIELD CORPORATION	*Scope of Work*
	THE WAYNE KERR CORPORATION	*Constructive Changes*
	HIGH COST OF PERFORMANCE	*Contract Administration*
	THE PURVIS ENGINEERING CO.	*Cost Overrun*
	THREE MARTINIS	*Standard of Conduct*

CASE STUDY

TO FORGE OR CAST

When bids were opened on a solicitation to fabricate and install a model positioning system in a research wind tunnel, the low bid from ABC Company was found to be extremely low (about 1/2 the Government's estimate). When asked to confirm its bid price or make claim of error, ABC Company requested a pre-award conference to review the technical requirements of the specifications.

During the conference ABC stated that their bid was based on furnishing a *casting* for the main strut. The Government technical representative who prepared the specification had intended that a *forging* be used. The strut is represented on a drawing sheet (part of the original bid package) as a *forging* by means of a technically recognized "cross-hatched" drafting symbol. There is also a statement in the specification under "testing" that all *forgings* shall be ultrasonically tested.

When the ABC Company responded to the request for confirmation, it stated that a casting would be the method of fabricating the main strut.

Other bids received are within the Government's estimate.

CASE DISCUSSION

1. What method of procurement is involved? What is the significance of the Government's estimate?

2. Should the Government consider a casting? Is it possible that casting is just as good as, or better than, forging? When should this have been considered?

3. Clarity of specifications and use of symbol. What about "pre-award conference" in this method of procurement?

4. What alternatives are open to the contracting officer?

5. What actions might other bidders take?

6. What would you do in this case?

CASE STUDY

STEELE'S DILEMMA

Joe Steele, a contracting officer, received a Procurement Request for the development and production of 35 items of a certain electronics component. The items, of an estimated cost of $1,450 each, were to be provided as government-furnished equipment to the prime contractor of a major NASA space system. The Procurement Request recommended four firms that the initiator considered fully qualified. Two had produced the same item under previous contracts with NASA; the other two were well known contractors who had performed successfully in the past on numerous electronics contracts.

Checking the Master Bidders List, Steele discovered that 12 other firms were listed as developers of electronics items and equipment of the same general type as that now required. He telephoned the PR initiator, Stu Smith, to determine whether all 12 firms would be acceptable sources. The following conversation ensued:

"Stu, this is Joe Steele in Procurement. I have your PR here, with the firms you recommended as qualified sources. In checking the Master Bidders List, however, I find 12 others that might be okay for the job. Do you object to adding these other firms to the solicitation list?"

"Joe, I'm against it. Some of those firms (he mentioned two) have given me trouble in the past. I considered two others and rejected them as unqualified. I haven't had any experience with the rest."

"That's fine, Stu. If you'll give me a memo on the firms which aren't qualified, we'll forget them. Now, can I include the other eight?"

"You do anything you want, Joe. But I'm not going to approve award to a firm I don't know. These are complex items, and you know the importance of the system they're going to be used on. You've got to realize that there are some things such as experience, know-how, quality management, and even manufacturing techniques, that can't be written into drawings, specifications, or statement of work. To be sure of getting these things, you've got to have confidence in your contractor. And the only firms I've got confidence in are the four I recommended."

"Well, Stu, I agree with everything you say -- but you know I've got to comply with the regulations that require maximum competition on every Government procurement. And when I don't get it, I've got to justify why not. Will you give me a written statement to justify limiting the solicitation to your four sources?"

"Joe, I haven't got the time to do all that. What's more, I can't say definitively that one of your sources can't make the items. I'm just telling you, off the cuff, that I'm not willing to take a chance with

one of them. I'll tell you what, you go ahead and solicit all of them. That will cover you. Then I'll approve award to one of my boys and we'll all be happy. Okay?"

CASE DISCUSSION

1. Do you agree with Mr. Steele?

2. Do you agree with Smith's arguments?

3. What action should be taken in this case?

CASE STUDY

UNIVERSAL MOTORS

The Quality Laboratory of a Government agency, received an unsolicited proposal from the Universal Motors Corporation to check out the instrumentation of the Propulsion Systems Laboratory complex. Universal proposed a CPFF type contract. Although the proposal covered a twelve month period of performance, Universal specified that it would not guarantee to complete the task within one year.

Because of numerous problems resulting from various program adaptations, the technical advisor concurred in the proposal as presented by Universal.

Universal's proposal also contained the resumes of several personnel who had acquired valuable experience recently in similar complex efforts and promised to provide any three chosen by the Government to perform the contract (employee experience had been gained as a result of Universal's performance as a subcontractor to the Quality Laboratory's support Contractor).

The contract negotiator's first comment was that it appeared manhours were being purchased rather than the completion of a specific task.

The contract negotiator held a meeting which included representatives from the Universal, the Technical Representative and the Project Officer. After discussion, Universal refused to negotiate a Fixed-Price contract as suggested by the procurement representatives and further refused to accept a specification calling for the completion of the task within one year.

CASE DISCUSSION

1. Should a Fixed-Price type contract be used?
2. Can the Government specify a completion date for the work?
3. Should the Technical Representative accept whatever percentage of completion is accomplished by the Contractor at the end of twelve months?
4. What is the best type of contract for this problem?

CASE STUDY

THE ALTERNATE BID

The two-step formal advertising method was used to solicit proposals for ground-to-air communications equipment. Six proposals were received in response to a Request for Technical Proposals in step one. Generous Electronics Corporation submitted two proposals. Of the two, one reflected a method of approach standard to the industry, while the other offered an unsually interesting alternative. The requirements personnel at the R&D activity reasoned that Generous had obviously made definite advances in this field of communications. Along with the proposals of three other firms, both of Generous' proposals were judged technically acceptable; however, their alternate method of approach was viewed by the requirements personnel with extreme favor, and they indicated this in their evaluation. IFB's were then sent out, in accordance with the procedure of two-step formal advertising, to the firms submitting acceptable technical proposals.

Upon submission and opening of bids for step two, it was discovered that the Generous bid based on the standard approach was low, while its bid for the alternate approach was among the higher bids. The requirements personnel were pleased that Generous was in line for award and sought the advice of the procurement office concerning the incorporation of the desirable features of the alternate proposal into a contract with Generous.

CASE DISCUSSION

1. Should the procurement activity have considered Generous' alternate proposal? Explain.

2. If you were the contracting officer, what advice would you offer? Why?

CASE STUDY

CENTURY CORPORATION

The Century Corporation was awarded a negotiated Fixed-Price contract for the production of a number of Sounding Rockets. Total cost was in excess of $500,000.

Some forty-five days after award, the Contracting Officer issued a unilateral no-cost Change Order No. 1 covering minor changes to the Specifications. It further provided that "this Change will in no way affect price, delivery schedule, or any other terms of the contract."

No written acknowledgement was received from Century until about forty days after the Change Order was issued, when the Contracting Officer received a cost proposal complete with a detailed cost breakdown covering an increase of $96,325 in the contract price. The Contractor requested appropriate modification of the contract to cover the additional costs of the Change Order No. 1.

CASE DISCUSSION

1. What is the Contractor's position?
2. Is the Contracting Officer obligated to modify the contract as requested?

CASE STUDY

THE IMPROPER APPROACH

Dr. Frank Longworth, a physicist at the Research Development Center, was engaged in a study of the physical properties of isotopes. He decided that the development of an item of equipment that would measure certain characteristics of isotopes more accurately was needed to allow him to gather more precise data and speed up his study.

Accordingly, Dr. Longworth contacted two highly respected manufacturers of sophisticated testing equipment. Both firms had done work for RDC previously; both had performed successfully and on time. Dr. Longworth requested each firm to forward to him a technical proposal explaining its approach to the item of equipment and an estimate of the probable costs. He also asked them to meet with him to discuss this matter.

Within a month Dr. Longworth had met with both of the contractors and had received their technical and cost proposals. Both firms estimated the cost of the measuring device at approximately $350,000. Upon completion of his evaluation of the two proposals, Dr. Longworth decided that the Badger Company's proposal was technically superior to the Young Company's proposal -- even though its estimate of costs was slightly higher. Dr. Longworth then prepared a Procurement Request and forwarded it to the Contracts Division, requesting that action be taken to write a formal contract with the Badger Company. The PR stressed the urgency of the requirement and the necessity for immediate action.

Dr. Longworth told the contract negotiator that he had advised the Young Company of his decision to negotiate with the Badger Company and the reasons why its proposal was technically not as acceptable as Badger's.

CASE DISCUSSION

1. What do you think of Dr. Longworth's approach?

2. What do you think of the urgency of the requirement?

3. What steps would you take to make the contract?

CASE STUDY

THE BEST OF EVERYTHING

Fred Bottoms, an engineer in an R&D activity, completed his evaluation of the technical proposals received in response to a solicitation for a proposed project for the design and development of a new type of transceiver. Overall, the proposal submitted by James Hi-Fi was considered technically most acceptable. This firm had a record of successful development work for similar equipment for many military activities. While Mr. Bottoms was recommending James Hi-Fi for award, however, he had some reservations. Some of the other proposals he reviewed included special features that appeared superior to comparable features in the James Hi-Fi proposal because they permitted smaller size and lighter weight. None of the features in these proposals was marked as proprietary. Accordingly, Mr. Bottoms planned to notify the cognizant contracting officer to have these desirable features from the other proposals negotiated into the definitive contract with James Hi-Fi Corp.

CASE DISCUSSION

1. What do you think of Mr. Bottoms' idea?

2. What course of action can the contracting officer take?

CASE STUDY

THE NO CONTRACT CONTRACTOR

A study on space spectrum radio frequency sharing was authorized by a Government agency. 60K in funds was transferred to the Space Research Center (SRC). The American Scientific Laboratory Company was given the task to perform, by "informal means", i.e., a contract would be formalized "later". The ASL Company proceeded, submitting monthly progress reports to the Technical Officer, SRC. The study was needed for an international radio frequency conference to be held at an early date.

Subsequent to the informal go-ahead given to ASL Company, the Center was declared surplus. The so-called "contract" was transferred to the Glenn Space Flight Center (GSFC).

GSFC determined that no contract had ever been formalized, but agreed that the study was indeed needed. As a matter of fact, the study was completed and submitted to GSFC who accepted the finished study. The ASL Company requested payment of 60K.

CASE DISCUSSION

1. What should be done concerning this so-called contract?

2. Should the Contractor be paid?

CASE STUDY

THE OHM COMPANY

The Project Officer of a Government agency had a requirement for thirty (30) FM/FM multiplexers which were to be used in an expensive ($10.5 million) experiment involving space hardware. The Project Officer was also in a position to recommend a responsible Contractor who had developed such multiplexers as "off-the-shelf" items but which could be adapted to meet the engineering requirements of the space mission. To convert the basic configuration of multiplexers to meet mission requirements, several changes were needed requiring extensive soldering and welding. The design of the multiplexers also included such sophisticated electronic techniques as *cordwood* and *hybrid circuitry*.

Pursuant to the Procurement Request of the Project Officer, the Contracting Officer negotiated a sole source contract with the OHM Company for $90,000. During the course of the negotiations that preceded the award of the contract, the Project Officer and the President of the OHM Company agreed that there would be no provisions for Quality Assurance included in the contract, for the reasons that such requirements would cost more money and might impair the delivery of the multiplexers on the dates specified in the contract schedule.

The multiplexers delivered in the first shipment by the Contractor did not meet the contract specifications.

CASE DISCUSSION

1. Did the Government actually buy "off-the-shelf" products? Who furnished the design change requirements and what is their significance?

2. For whose benefit are quality assurance provisions included in a contract? What does the Government gain?

3. What are Government alternatives at this time?

CASE STUDY

THE THREE COATS

A Fixed-Price contract for $2,050,000 was awarded to the Mammoth Construction Company for the construction of a laboratory building. It included standard Warranty and Inspection clauses.

Mammoth subcontracted the exterior and interior painting of the building to Sprayer Associates, Incorporated.

The exterior of the building included large galvanized iron surfaces. The prime contract required such surfaces to be washed with a solution of copper sulfate crystals, rinsed with clear water when dry, and then given a prime coat of paint using a galvanized iron primer conforming to the designated Federal Specification. Finally, in addition to the primer, the exterior was to receive two coats of an enamel conforming to Federal Specifications. Exterior painting was restricted to periods when temperatures were in excess of 50°F.

The outside painting began in December and was completed prior to the following 28 February, the date on which the Government finally accepted the building from Mammoth.

During the course of the entire exterior painting operation, Government inspection personnel were on the job site and frequent discussions were held between representatives of Sprayer and the inspectors. Both Mr. Lox (the Government's construction engineer assigned to the job) and Mr. Stamp (also a Government employee) observed the spray painting and the deviations on the job being practiced by Sprayer Associates. It took about two weeks to apply one coat of paint.

In fact, the Government inspectors, on the one hand, enforced rigid compliance with Federal Specifications respecting certain aspects of interior painting, and on the other, waived (for example) the requirement that painting of the outside be performed when the air temperature was 50° or higher.

Actually, two coats of finish paint were applied although the inspectors and the Contractor agreed that a third finish coat would be applied in lieu of primer. The Government accepted the job with only two coats.

Prior to November of the following year, the Government became aware of the fact that the paint on the exterior metal siding of the new building was blistering and peeling in many areas. The Contracting Officer's Representative, Mr. Hardman, advised the Mammoth Construction Company of the situation and they, in turn, notified Sprayer Associates. The Government also engaged a Baltimore firm of chemists and engineers to conduct an inspection and perform tests.

Three months later, Mr. Hardman wrote a letter to Mammoth, in part, as follows:

> "The results of the tests and inspection reveal that no primer of any type was applied to the exterior of the building in spite of the fact your subcontractor (Sprayer) stated that all surfaces were primed. Sprayer contends that the painting was accomplished as directed by Government representatives and substitution of a commercial type galvanized primer in lieu of the Federal type specification primer was approved. The tests prove that neither the primer specified nor the alleged approved substitute was applied."

The following month, the Contracting Officer wrote Mammoth a letter directing the removal of the exterior paint and repainting (including primer) in accordance with the terms of the contract. Mammoth appealed to the Board of Contract Appeals.

In arguing his case before the Board of Contract Appeals, Mammoth contended that:

- Any deviations from contract requirements were authorized by the Government through its inspection and engineering personnel present on the job. (Mr. Gray, the head of the Inspection Section at the time of the performance of the contract, admitted that these changes were conscious deviations from the specifications.)
- No specific Change Orders to the contract were required with respect to the painting because other similar deviations had been tacitly accepted by the Government inspectors during performance.
- The Contractor has no further liability.

CASE DISCUSSION

1. Do you agree with the Contractor?
2. Why?

CASE STUDY

NEW ERA PLASTICS COMPANY

The New Era Plastics Company was essentially a research engineering operation conducted by two distinguished engineers. The Government awarded a Firm Fixed-Price contract to New Era to engineer a pilot manufacturing process to produce complex laminated plastic test panels.

The test panels were to comprise laminations of glassed, reinforced epoxy resin with interior layers of urethane rubber. During the period of research and experimentation, it became evident to New Era's engineers that, within the present state-of-the-art, it was an absolute impossibility to produce the panels completely free of some air bubbles (as called for in the Specifications).

Government engineers and the Contracting Officer agreed with the conclusions of New Era (after a ninety-day extension of the contract to prove this point) and were negotiating to modify the specifications. The Government's new draft, however, was not satisfactory to New Era because of inclusion of a required time provision for "curing." New Era was in the process of negotiating out of the new Supplemental Agreement this unacceptable provision when suddenly the Contracting Officer terminated the contract for default.

CASE DISCUSSION

1. Was the Contracting Officer justified in the Default Termination because of the Contractor's inability to produce under the original specifications?

CASE STUDY

CHANGE IN REQUIREMENTS

The ABC Corporation was awarded a contract to convert two instrumentation ships so as to support certain aspects of the Apollo Program. With Government approval, and in accordance with the original proposal, ABC subcontracted to XYZ Shipyard to do the marine, structural and other interface work. The Government contract with ABC stated that the shipyard work would be done by the XYZ Shipyard as a subcontractor to ABC.

Most of the electronic equipment were Contractor-furnished, including the C-Band Radar. The contract was progressing reasonably on schedule, one ship's Radar was about to be delivered and the second in about two months.

At this time, a requirement was received that would necessitate the deletion and disposition of one of the Radars under procurement and install, in lieu, a more elaborate acquisition-type C-Band Radar. This Radar would be procured by the Government.

Lead time for the procurement of this new Radar far exceeded the remaining time for the conversion under the basic contract.

ABC was willing to accept the new work, but XYZ refused because the extended time would interfere with more lucrative and DOD-significant contracts.

CASE DISCUSSION

1. As the Contracting Officer, what course of action will you take?

CASE STUDY

THE TERMINATION-REPROCUREMENT CASE

John Tassin, a negotiator in the Contracts Division, placed a fixed-price contract with the Wonder Electronics Corporation for 25 units of an urgently needed electronics equipment. The equipment had originally been developed for the Air Force by the ABC Engineering Company, which had later produced 500 units under an initial production contract at a price of $450 per unit. For the current contract quotations had been solicited from five firms, all of whom were considered qualified to manufacture the equipment. Four companies submitted proposals, as follows:

Wonder Electronics Corporation	$205 per unit
Beeline Associates	285 per unit
Powell Products, Incorporated.	320 per unit
ABC Engineering Company.	370 per unit

Since Wonder's price was considered fair and reasonable in all respects, Mr. Tassin placed the contract with the company without further negotiation.

As a result of a series of circumstances for which it was held responsible, Wonder failed to make deliveries under the contract, and its contract was terminated for default. The requiring activity decided to reprocure the equipment and to assess the additional costs involved against Wonder's account. Since ABC Engineering had developed specifications for the equipment and had already produced 500 units successfully, and since delivery of the items was critical, Mr. Tassin solicited only ABC Engineering for the reprocurement contract, which was placed at a price of $370 per unit.

Deliveries under the contract were successfully completed three weeks ahead of schedule. At this time Wonder appealed the activity's assessment of excess costs against it, arguing that they were "excessive and unrealistic." To substantiate its position, Wonder maintained that ABC Engineering's unit price was almost double its own and was $95 more than the quotation from the next lowest offeror, Beeline Associates.

CASE DISCUSSION

1. Do you agree or disagree with the Wonder Company's position in this case? What are your reasons?

2. What are some procurement guidelines in a reprocurement action against a defaulted contractor?

CASE STUDY

THE FAIRFIELD CORPORATION

The Fairfield Corporation had delivered and received partial payment for fifty of a total of one hundred items of equipment it was producing for NASA under a firm fixed-price contract. At that time the cognizant contracting officer issued a unilateral Change Order to the company directing a major change in the contract specifications. The Change was to affect all units under the contract, including the fifty already delivered and accepted. This was considered necessary for two reasons:

1. the unchanged items were of no value to NASA.
2. NASA felt that no other contractor possessed the required production techniques that Fairfield had utilized originally in developing the equipment.

NASA planned to return the fifty delivered units to Fairfield's plant at Government expense so that the company could make the required change.

When it received the Change Order, Fairfield objected violently to changing the fifty units that had already been delivered and accepted. The company had a large backlog of Government and commercial business, and the change presented severe scheduling problems. While Fairfield was building a new addition to its plant, the facility would not be ready in time to solve the immediate scheduling problems. The company agreed to make the change to the fifty items that remained to be delivered, but it demanded that the change not affect the fifty units already accepted by NASA.

To substantiate its argument, the company claimed that NASA did not have the right to order the change to the delivered items without its consent. In other words, the Changes Clause did not apply, since the items had already been accepted and paid for. The company also referred to the provisions of the Inspection Clause which makes final acceptance conclusive except for certain specified exceptions, such as fraud, which did not apply.

Fairfield expressed willingness to rework the delivered items at a future date when it had dissipated its backlog and the new plant facility was in operation. It felt that this task should be covered by an entirely new contract - not as a change to the existing contract.

CASE DISCUSSION

1. Do you agree or disagree with Fairfield's arguments that rework of fifty items delivered and accepted cannot be effected by unilateral action of the contracting officer under the Changes Clause or other contract terms?

2. Does Fairfield have the right to perform other work and thus dissipate some of its production backlog before making the change to the fifty undelivered units?

3. If the company will agree, or is forced, to change the fifty delivered units, should its backlog of other Government and commercial work be taken into account in "equitably adjusting" the contract delivery schedule?

CASE STUDY

THE WAYNE KERR CORPORATION*

The Marshall Space Flight Center, Huntsville, Alabama, issued an RFP asking interested companies to submit proposals for research and development to design, develop, and fabricate two capacity measuring systems, referred to as "probes." The purpose of the probes was to measure static and dynamic displacement of the float in a hydrostatic gas bearing. The RFP advised that the proposed contract would be on a cost-plus-fixed-fee basis.

Five companies submitted proposals of which three were evaluated as technically acceptable. This included the proposal from the Wayne Kerr Corporation, which proposal stated that it was for a "fixed-price" contract. The letter of January 20, 1967, covering the proposal stated in part:

> "The Wayne Kerr Corporation prefers to quote the required item on a fixed-price basis. The Wayne Kerr Corporation has developed a solid state commercial system which will be militarized and repackaged for the contract."

The Wayne Kerr proposal was for $32,300, the next lowest was $43,293, and the third was $53,463; the latter two were technically acceptable and for a cost-plus-fixed-fee contract. Contract No. NAS8-20739 was awarded to the Wayne Kerr Corporation on May 4, 1967, for the sum of $33,900 on a fixed-price basis.

The contract called for the delivery of the design in two months, the pilot model within five months, and the production model in six months, with monthly progress reports. The delivery schedule was extended in accordance with bilateral Modification No. 1, dated June 14, 1968, to provide for delivery of the pilot model by July 31, 1968, and the production model by August 30, 1968, in consideration of a reduction in price of $750. The delivery schedule was further extended by a modification dated Sept. 1968, to provide for delivery of the pilot model by January 28, 1969, in consideration of a reduction in price of $50, making the total revised price $33,100.

The pilot model was first delivered in August 1968 but was rejected as not complying with the inspection provisions of the contract. It was returned for rework in September 1968 and finally delivered and accepted in January 1969. The production model was delivered in June 1969. The contractor submitted its voucher for payment on March 9, 1970, with the notation thereon:

> "This invoice does not prejudice any claim for relief to be made which relates to losses occurred in execution of the contract."

Marshall effected payment on April 1, 1970, less a discount of $165.75 for payment within 30 days as provided in the contract.

The delays in delivery were occasioned partly by technical difficultes which the

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* NASA BCA No. 670-10, August 23, 1973. NAS8-20739.

contractor encountered in performing the contract. This was further complicated by technical difficulties experienced by subcontractors. It was apparent that Wayne Kerr was unfamiliar with the details and procedures required under NASA contracts, particularly NPC 200-4 (now NHB 5300.4(3A)), which sets forth requirements for soldered electrical connections. Several of the technical difficulties the contractor and its subcontractors experienced in performing the contract work centered on compliance with the quality assurance provisions required by the contract.

Certain deficiencies in work performed which caused work to be rejected were based on noncompliance with NPC 200-4. In these instances MSFC required the contractor to do certain rework which caused the contractor extra expense. The contractor considered that the Government's stringent application of NPC 200-4 caused him additional costs. Accordingly, on several occasions the contractor requested deviations from NPC 200-4. Most of these were granted, but the requested deviations indicated that the contractor acknowledged that those details were specification requirements. The contractor also claimed that it understood NPC 200-4 was not to apply to the pilot model.

In April 1970, after delivery and payment, the contractor filed a timely notice of appeal under the provisions of the standard Disputes Clause. The appeal was a claim for constructive change in the amount of $93,983 for extra work that was required by MSFC. The justification pointed out that the quality control and inspection provisions of the contract were ambiguous; that it was required to do work in addition to the requirements of the contract to comply with MSFC's interpretations; and that this constituted a constructive change. The contractor also claimed that inspection was delegated to DCAS, who inspected and passed the end items which were later not accepted by MSFC.

The contractor further stated that its costs had totaled $127,883 and asked that its claim for $93,983 be allowed, especially since the acceptance of a fixed-price contract "amounted to a unilateral palpable mistake in view of the difficulties of the assignment."

CASE DISCUSSION

1. Explain the validity of Wayne Kerr's proposal on a fixed price basis when the RFP called for a CPFF basis.

2. What do you think of the contracting officer's decision to award a fixed-price contract?

3. What arguments would you advance to support the contractor's claim?

4. What are the arguments in favor of the contracting officer?

CASE STUDY

HIGH COST OF PERFORMANCE

The Crane and Derrick Corporation entered into a fixed-price contract with a Government agency to construct a large floating derrick for $1,300,000. Delivery of the derrick was to be within 420 calendar days. The contract did not contain any cost escalation provisions.

As Crane and Derrick's work progressed under the contract, the contractor incurred additional costs that were neither contemplated nor foreseen at the time the contract was negotiated and executed. The contractor was of the opinion that he should recover the extra cost of performance because the Government received a benefit for which it would have been willing to pay had the true facts of the additional costs been known.

Since these cost problems arose during performance of the contract and could not have been anticipated at the time of contract formation, Crane and Derrick Corporation requested the contracting officer to authorize an equitable adjustment on its behalf on the basis of: (i) the current, unprecedented, spiraling increases in the costs of raw materials necessary to perform under the contract; and (ii) a steel allocation program imposed by the iron and steel industry during the procurement phase of the contract.

The contracting officer carefully weighed the request for an equitable adjustment on the stated facts provided by the contractor. The contracting officer was aware of price increases in the industry and also knew of the industry allocation program. While he knew the decision was his to make, the contracting officer requested the project engineer to come to his office to discuss this matter.

CASE DISCUSSION

1. Do you agree with the contractor's request for an equitable adjustment?

2. If you were the project engineer, what advice would you provide?

3. If you were the contracting officer, what action would you take?

CASE STUDY

THE PURVIS ENGINEERING COMPANY

A Government agency procuring activity placed a negotiated CPFF contract with the Purvis Engineering Company for development and fabrication of 350 data transmitters. The contract contained a cost ceiling of $500,000, and a fixed fee of $35,000. Because of the urgency of the requirement, the procurement was designated urgent and overtime work was authorized.

Final deliveries under the contract were successfully completed on schedule. Prior to final settlement of the contract, the ACO received a request from Purvis for a retroactive increase in the contract cost ceiling to $546,000. Pertinent excerpts from the company's letter supporting this request are included below:

> "A formal request is hereby made that the estimated cost under subject contract be increased to $546,000 to permit reimbursement of our actual costs incurred in performance of the work. As you know, we have had to work nights and Sundays to complete the subject contract on schedule; to achieve this end, the technical representatives have worked with us much of the time.
>
> "Our failures to notify you (1) when we had incurred eighty-five percent of the costs under our contract, and (2) before incurring costs in excess of the cost ceiling, were administrative oversights caused largely by the fact that all emphasis was being placed on effecting deliveries to meet scheduled missile tests. Simply stated, our philosophy, as well as that of the technical representative at our plant, was to make deliveries regardless of all else. And this, as you know, is just what we did.
>
> "Two other factors which contributed to our failures to notify you were: (1) a three-week strike in April of our office and clerical workers which, in effect, forced a virtual shutdown of our administrative operations; and (2) the extremely short lead time under our contract, which forced us to put unusually high levels of effort on the contract, at various periods during production. Since our end-of-month cost records do not come out until the 26th day of the following month, we frequently had no way of accurately assessing our cost status under this contract. As a result, we found ourselves in an overrun situation before we realized what was happening...."

CASE DISCUSSION

1. Can the overrun be funded retroactively? If so, should it be funded?
2. What factors bear on the determination?

3. What do you consider the reliability of the "estimated cost" set forth in a cost-reimbursement type contract?

4. What fundamental requirement is imposed on a Contractor to keep the Government apprised of costs incurred? May the Government impose additional requirements?

5. What is "default"? Is it ever excusable? What constitutes "excusable"?

6. How and can the Government fund this overrun?

7. What would you do in this case and why?

CASE STUDY

THREE MARTINIS

Horace Cornelia, who had recently arrived at a NASA Research Center. was appointed contracting officer on a computer equipment contract. The contract had run for several years and totaled more than $3,000,000. It had been his predecessor's custom to hold a review and analysis meeting at the contractor's plant on a monthly basis, in order that contractor progress could be evaluated.

It had also been the custom for certain VIP's from Washington to attend these review and analysis meetings. Another custom the new contracting officer discovered was that each day of the normal three-day meeting, the contractor would take all meeting participants to the local country club for lunch, complete with martinis.

Mr. Cornelia found himself on the brink of a dilemma. He was aware that under Government standards of conduct he should question the practice of accepting luncheons and drinks provided by the contractor; but being a relative *junior*, he was also aware that the personnel from Washington, who were more remotely involved in this procurement, had no compunction about partaking of the contractor's hospitality. Being new on the contract, and not wishing to make a spectacle of himself or embarrass anyone, Horace contacted the country club personnel and made arrangements to leave a check for his own luncheons and drinks.

This arrangement seemed to work well for the three days of the review and analysis meeting, and Mr. Cornelia returned home congratulating himself. Approximately two weeks after his return, however, he received a letter from the country club where he had eaten his luncheons. The management of the country club returned all of Horace's checks and stated that only members of the club were authorized to make payments for entertainment at the club.

CASE DISCUSSION

1. If you were the contracting officer, how would you handle this?

2. Would you permit this type of meeting in the future?

3. Do you agree with this practice?

4. If you were the contractor, how would you handle these meetings?